City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT (EAS) SHORT FORM

FOR UNLISTED ACTIONS ONLY • *Please fill out and submit to the appropriate agency* (see instructions)

Part I: GENERAL INFORMATION

1. *Does the Action Exceed Any Type I Threshold in 6 NYCRR Part 617.4 or 43 RCNY §6-15(A) (Executive Order 91 of 1977, as amended)?* ☐ YES ☒ NO

If "yes," **STOP** and **complete the FULL EAS FORM**.

2. *Project Name* 270 Nostrand Avenue

3. *Reference Numbers*

CEQR REFERENCE NUMBER (to be assigned by lead agency)	BSA REFERENCE NUMBER (if applicable)
21DCP043K	
ULURP REFERENCE NUMBER (if applicable)	OTHER REFERENCE NUMBER(S) (if applicable) (*e.g.*, legislative intro, CAPA)
210151 ZMK; N210152 ZRK	

4a. *Lead Agency Information*			**4b. *Applicant Information***		
NAME OF LEAD AGENCY			NAME OF APPLICANT		
New York City Department of City Planning			BRP East Brooklyn Development LLC		
NAME OF LEAD AGENCY CONTACT PERSON			NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON		
Olga Abinader, Director, Environmental Assessment and Review Division			Stefanie Marazzi, Hirschen Singer & Epstein LLP		
ADDRESS 120 Broadway			ADDRESS 40 Exchange Place, Suite 1502		
CITY New York	STATE NY	ZIP 10271	CITY New York	STATE NY	ZIP 10005
TELEPHONE 212.720.3493	EMAIL oabinad@planning.nyc.gov		TELEPHONE 212.391.8045	EMAIL smarazzi@hseny.com	

5. *Project Description*

The Applicant, BRP East Brooklyn Development LLC, is seeking approval of two actions (the "Proposed Actions") subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 444,289 gross square foot (gsf) mixed-use building containing residential, commercial, and community facility uses with attended parking (the "Proposed Development") at 270 Nostrand Avenue (Block 1778, Lot 55 – the "Development Site") in the Bedford Stuyvesant neighborhood of Brooklyn, Community District 3.

The area directly affected by the Proposed Actions consists of the entirety of the Development Site (Block 1778, Lot 55) and an approximately 1.83-foot wide portion of the adjacent lot to the west (Block 1778, Lot 49), herein referred to as the "Project Area" or "Rezoning Area." The currently vacant Development Site is approximately 47,634 square feet (sf) in size, is currently zoned R7A, and is within a Voluntary Inclusionary Housing designated area and the Transit Zone.

The Proposed Actions consist of the following:

• An amendment to Zoning Map 17a to rezone the area within 240 feet of Nostrand Avenue from an R7A zoning district to an R8A zoning district, and to map a C2-4 commercial overlay within 100 feet of Nostrand Avenue and extending 240 feet within 100 feet of Dekalb Avenue (comprising the Development Site, and an approximately 1.83-foot-wide portion of adjacent Lot 49.

• A Zoning Text Amendment to Appendix F of the Zoning Resolution to designate the Project Area as a Mandatory Inclusionary Housing Area.

The above-referenced actions are subject to approval by the CPC pursuant to the Uniform Land Use Review Procedure (ULURP). Refer to Attachment A, "Project Description and Screening Analyses," for additional information.

Project Location

BOROUGH Brooklyn	COMMUNITY DISTRICT(S) 3	STREET ADDRESS 270 Nostrand Avenue
TAX BLOCK(S) AND LOT(S) 1778, Lot 55 and p/o Lot 49		ZIP CODE 11205

DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS The Project Area is located on the eastern portion of Brooklyn Block 1778, extending 240 feet west of Nostrand Avenue, between DeKalb Avenue to the north and Kosciuszko Street to the south.

EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION, IF ANY R7A | ZONING SECTIONAL MAP NUMBER 17a

6. *Required Actions or Approvals* (check all that apply)

***City Planning Commission*:** ☒ YES ☐ NO ☒ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

☐ CITY MAP AMENDMENT	☐ ZONING CERTIFICATION	☐ CONCESSION
☒ ZONING MAP AMENDMENT	☐ ZONING AUTHORIZATION	☐ UDAAP
☒ ZONING TEXT AMENDMENT	☐ ACQUISITION—REAL PROPERTY	☐ REVOCABLE CONSENT
☐ SITE SELECTION—PUBLIC FACILITY	☐ DISPOSITION—REAL PROPERTY	☐ FRANCHISE
☐ HOUSING PLAN & PROJECT	☐ OTHER, explain:	

☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Board of Standards and Appeals*:** ☐ YES ☒ NO

☐ VARIANCE (use)
☐ VARIANCE (bulk)
☐ SPECIAL PERMIT (if appropriate, specify type: ☐ modification; ☐ renewal; ☐ other); EXPIRATION DATE:
SPECIFY AFFECTED SECTIONS OF THE ZONING RESOLUTION

***Department of Environmental Protection*:** ☐ YES ☒ NO If "yes," specify:

Other City Approvals Subject to CEQR (check all that apply)

☐ LEGISLATION	☐ FUNDING OF CONSTRUCTION, specify:
☐ RULEMAKING	☐ POLICY OR PLAN, specify:
☐ CONSTRUCTION OF PUBLIC FACILITIES	☐ FUNDING OF PROGRAMS, specify:
☐ 384(b)(4) APPROVAL	☐ PERMITS, specify:
☐ OTHER, explain:	

Other City Approvals Not Subject to CEQR (check all that apply)

☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC)	☐ LANDMARKS PRESERVATION COMMISSION APPROVAL
	☐ OTHER, explain:

***State or Federal Actions/Approvals/Funding*:** ☐ YES ☒ NO If "yes," specify:

7. *Site Description:* *The directly affected area consists of the project site and the area subject to any change in regulatory controls. Except where otherwise indicated, provide the following information with regard to the directly affected area.*

***Graphics*:** *The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11 x 17 inches in size and, for paper filings, must be folded to 8.5 x 11 inches.*

☒ SITE LOCATION MAP ☒ ZONING MAP ☒ SANBORN OR OTHER LAND USE MAP
☒ TAX MAP ☐ FOR LARGE AREAS OR MULTIPLE SITES, A GIS SHAPE FILE THAT DEFINES THE PROJECT SITE(S)
☒ PHOTOGRAPHS OF THE PROJECT SITE TAKEN WITHIN 6 MONTHS OF EAS SUBMISSION AND KEYED TO THE SITE LOCATION MAP

Physical Setting (both developed and undeveloped areas)

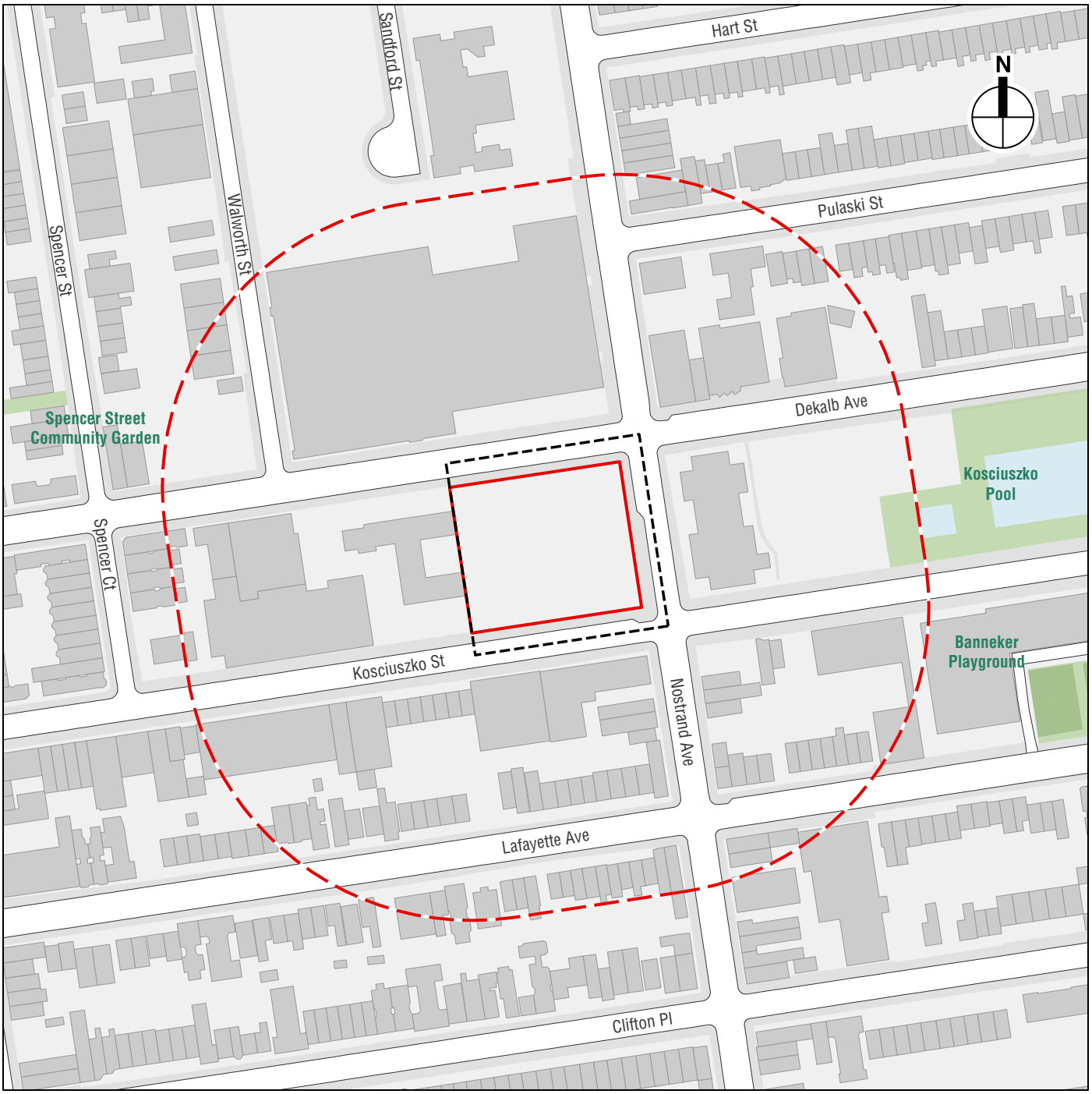
Total directly affected area (sq. ft.): approx. 47,634 | Waterbody area (sq. ft) and type: n/a
Roads, buildings, and other paved surfaces (sq. ft.): approx. 47,634 | Other, describe (sq. ft.): n/a

8. *Physical Dimensions and Scale of Project* (if the project affects multiple sites, provide the total development facilitated by the action)

SIZE OF PROJECT TO BE DEVELOPED (gross square feet): 444,289
NUMBER OF BUILDINGS: 1 | GROSS FLOOR AREA OF EACH BUILDING (sq. ft.): 444,289
HEIGHT OF EACH BUILDING (ft.): 145 ft. to top of roof (154 ft. accounting for rooftop mechanical bulkheads) | NUMBER OF STORIES OF EACH BUILDING: 14

Does the proposed project involve changes in zoning on one or more sites? ☒ YES ☐ NO
If "yes," specify: The total square feet owned or controlled by the applicant: approx. 47,634 (Block 1778, Lot 55)
The total square feet not owned or controlled by the applicant: approx. 200 (Block 1778, p/o Lot 49)

10.21.19



Development Site

Study Area (400-foot perimeter)

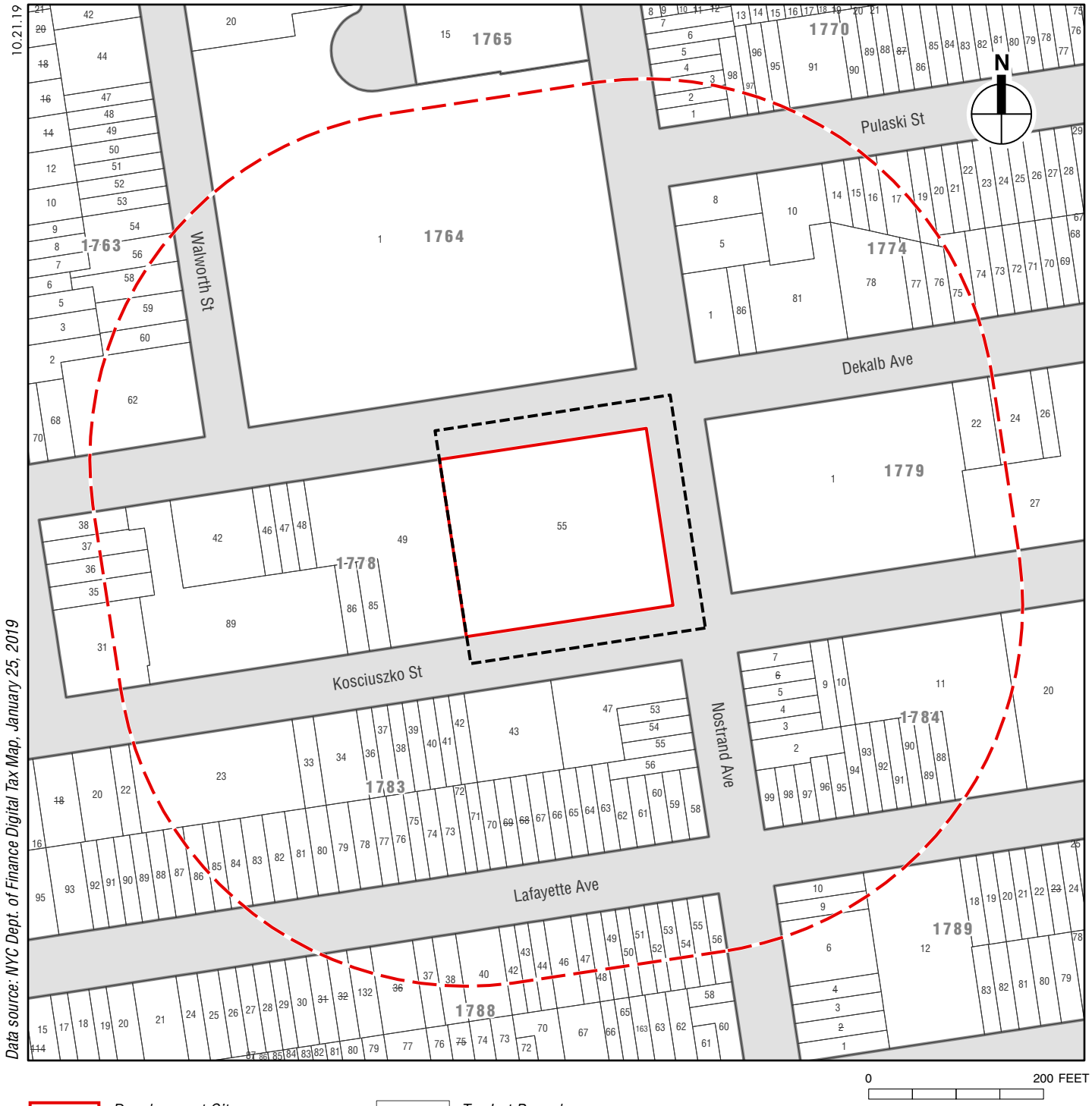
Rezoning Area



Project Location

270 NOSTRAND AVENUE

Figure 1

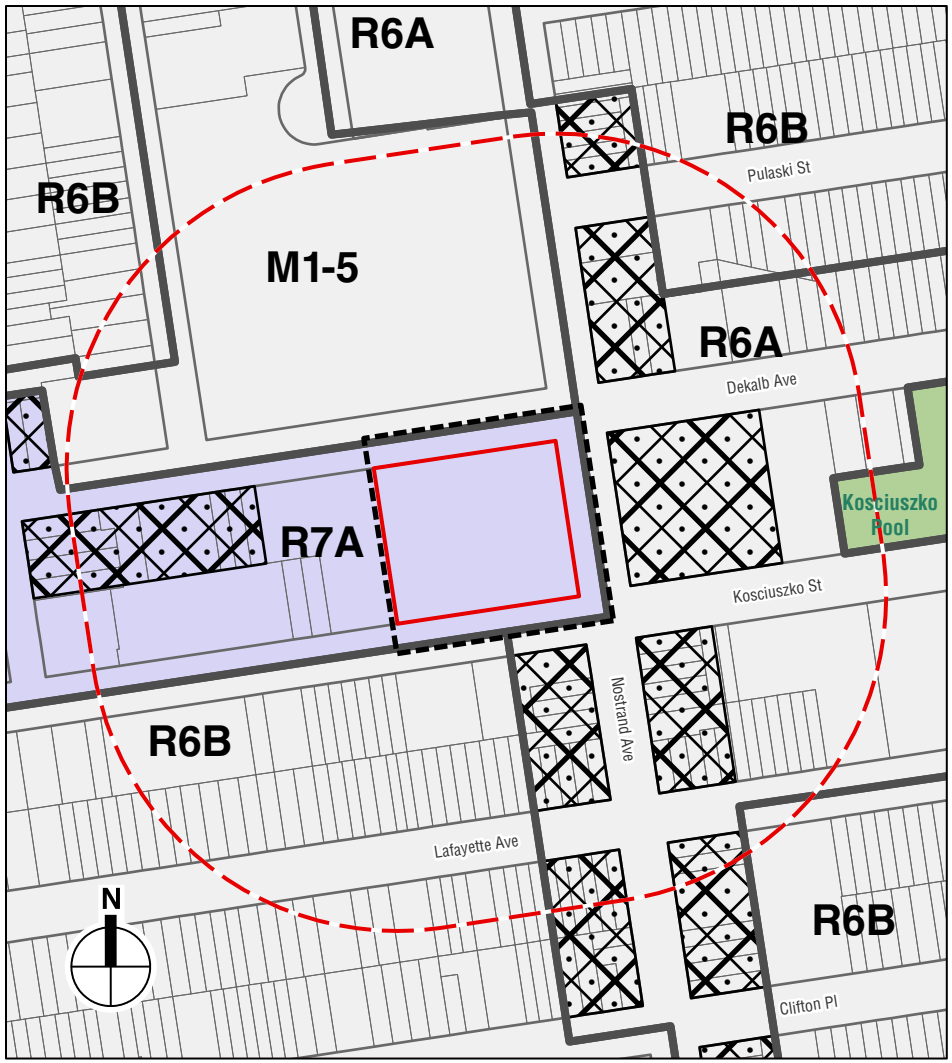


Tax Map

270 NOSTRAND AVENUE

Figure 2

12.10.19



Existing Zoning



Proposed Zoning

Data source: NYC Dept. of City Planning GIS Zoning Features, July 2018

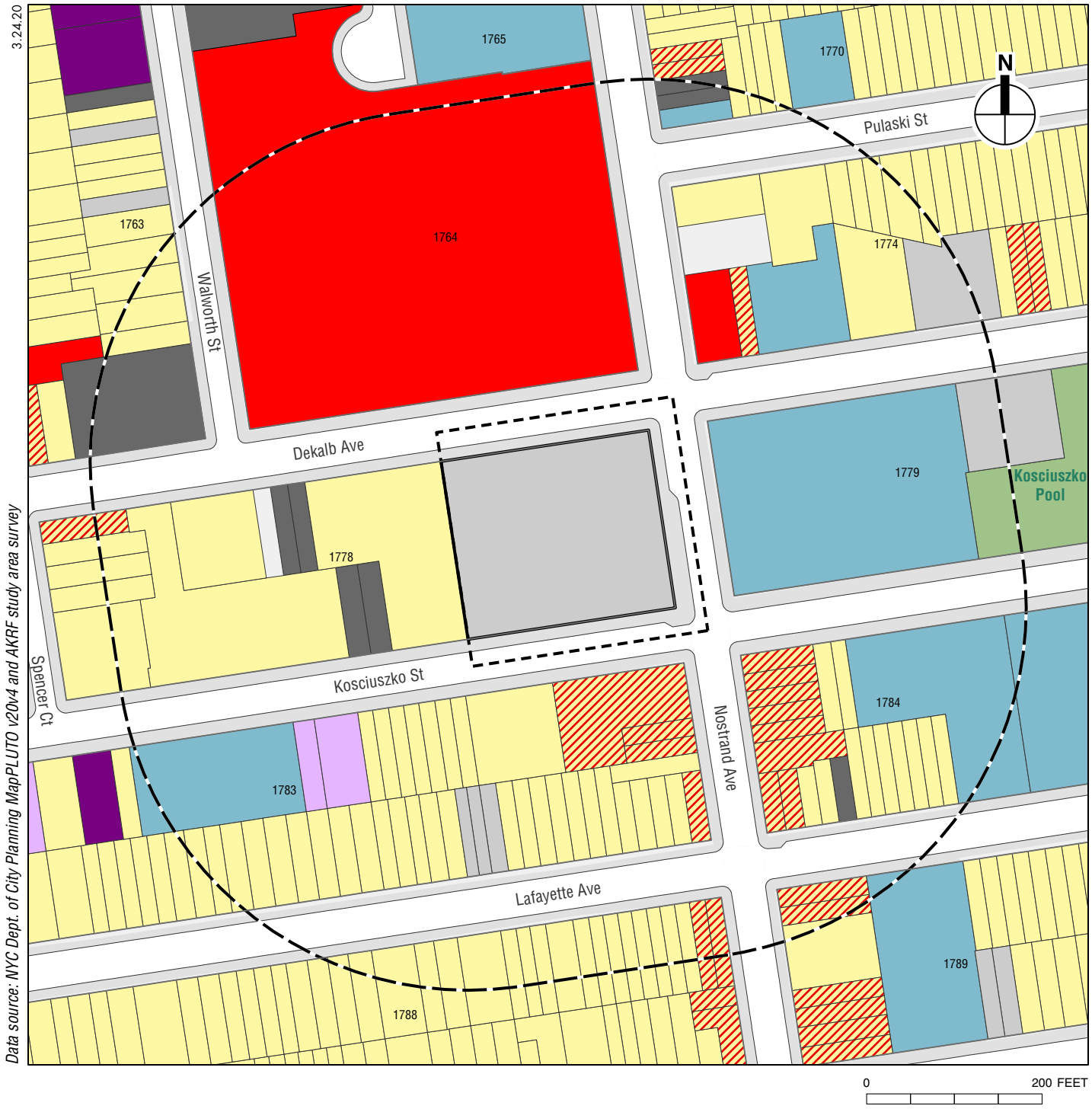
Development Site
Study Area (400-foot perimeter)
Rezoning Area
Zoning District Boundaries
C2-4 Commercial Overlay District
Voluntary Inclusionary Housing Designated Area
Mandatory Inclusionary Housing Designated Area

0 400 FEET

Existing and Proposed Zoning

270 NOSTRAND AVENUE

Figure 3

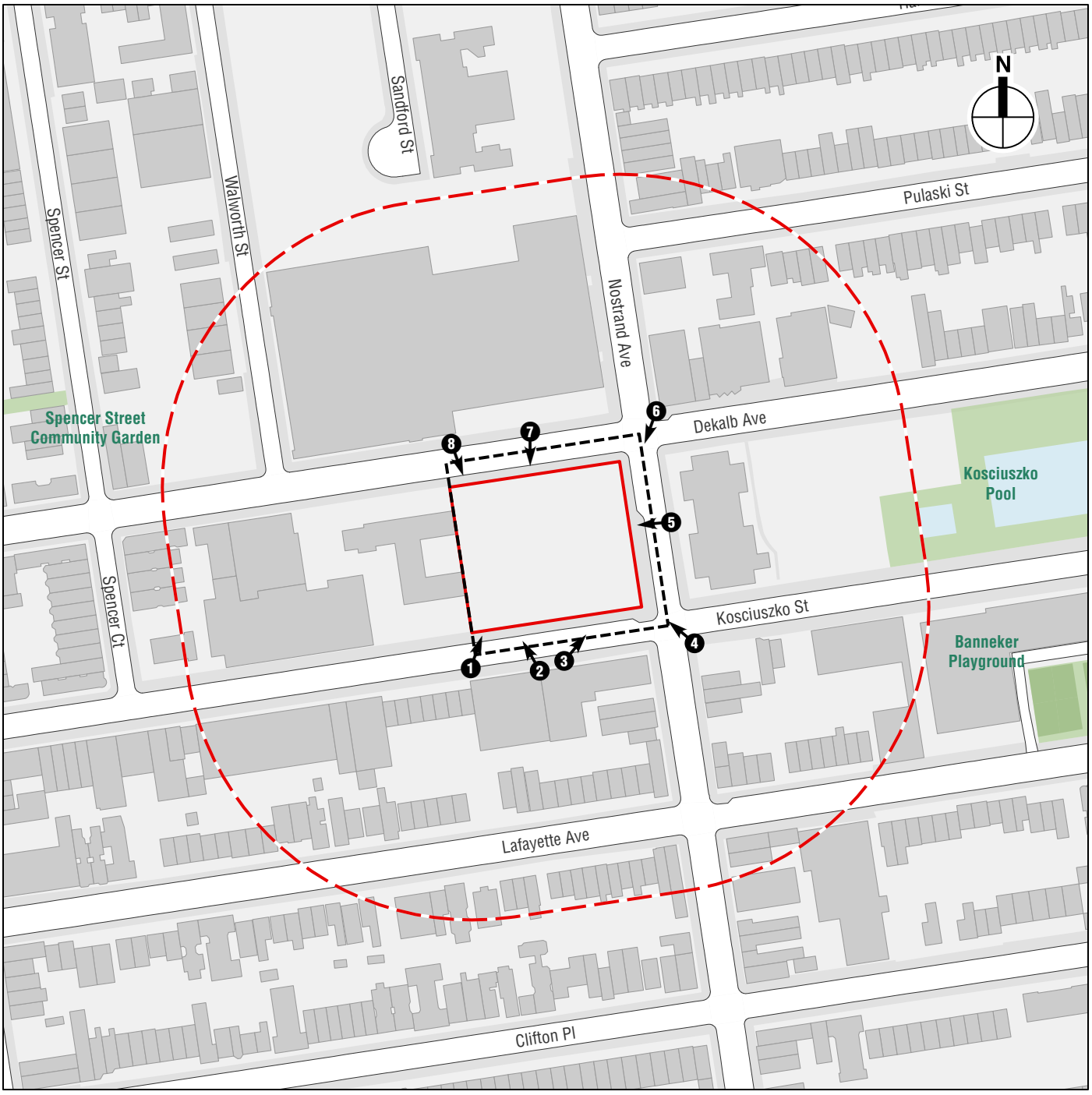


Existing Land Use

270 NOSTRAND AVENUE

Figure 4

10.21.19



Development Site

Study Area (400-foot perimeter)

Rezoning Area

Photo View Direction and Reference Number

Key to Photographs

270 NOSTRAND AVENUE

Figure 5



1



2

Existing Photographs

Figure 5a



3



4

Existing Photographs

Figure 5b



5



6

Existing Photographs

Figure 5c



7



8

Existing Photographs

Figure 5d

Does the proposed project involve in-ground excavation or subsurface disturbance, including, but not limited to foundation work, pilings, utility lines, or grading? ☒ YES ☐ NO

If "yes," indicate the estimated area and volume dimensions of subsurface permanent and temporary disturbance (if known):

AREA OF TEMPORARY DISTURBANCE: 47,634 sq. ft. (width x length) VOLUME OF DISTURBANCE: 431,201.81 cubic ft. (width x length x depth)

AREA OF PERMANENT DISTURBANCE: 47,634 sq. ft. (width x length)

Description of Proposed Uses (please complete the following information as appropriate)

	Residential	***Commercial***	***Community Facility***	***Industrial/Manufacturing***
Size (in gross sq. ft.)	420,876	22,285	1,128	0
Type (*e.g.,* retail, office, school)	487 units	Local retail	Medical Office	

Does the proposed project increase the population of residents and/or on-site workers? ☒ YES ☐ NO

If "yes," please specify: NUMBER OF ADDITIONAL RESIDENTS: 1,334 NUMBER OF ADDITIONAL WORKERS: 95

Provide a brief explanation of how these numbers were determined:

Residents: 2.75 persons per household (2013–2017 ACS data for Brooklyn) x 487 dwelling units (DUs) = 1,339 total
Employees: Estimated based on 1 employees per 333.3 gsf of retail space (67), 1 employee per 25 DUs (19), 1 employee per 250 gsf of community facility space (5), and 1 employee per 50 attended parking spaces (4) = 95 total

Does the proposed project create new open space? ☐ YES ☒ NO If "yes," specify size of project-created open space: sq. ft.

Has a No-Action scenario been defined for this project that differs from the existing condition? ☒ YES ☐ NO

If "yes," see Chapter 2, "Establishing the Analysis Framework" and describe briefly: In the future absent the Proposed Actions, the Applicant is likely to develop an as-of-right residential and community facility building on the Development Site consistent with the site's existing R7A zoning district (the "No Action Development"). The No Action Development would be nine stories (95 feet) tall with approximately 249,465 gsf of residential floor area (approximately 305 dwelling units) and approximately 25,060 gsf of community facility space (assumed as a medical office use) on the ground floor and cellar levels. Refer to Attachment A, "Project Description and Screening Analyses," for a detailed description of the No Action Development, including conceptual plans.

9. *Analysis Year* CEQR Technical Manual Chapter 2

ANTICIPATED BUILD YEAR (date the project would be completed and operational): 2023

ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS: 24 months

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? ☒ YES ☐ NO IF MULTIPLE PHASES, HOW MANY?

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: ULURP approvals are anticipated in 2020. According to the Applicant, the construction period at the Development Site, including excavation and foundation activities, superstructure construction, and interior/exterior systems would not exceed 24 months and is considered to be short-term (i.e., less than 2 years) in accordance with the CEQR Technical Manual. Full occupancy is expected in 2023.

10. *Predominant Land Use in the Vicinity of the Project* (check all that apply)

☒ RESIDENTIAL ☐ MANUFACTURING ☒ COMMERCIAL ☐ PARK/FOREST/OPEN SPACE ☒ OTHER, specify: Institutional

Part II: TECHNICAL ANALYSIS

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the "no" box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the "yes" box.
- For each "yes" response, provide additional analyses (and, if needed, attach supporting information) based on guidance in the CEQR Technical Manual to determine whether the potential for significant impacts exists. Please note that a "yes" answer does not mean that an EIS must be prepared—it means that more information may be required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to provide additional information to support the Short EAS Form. For example, if a question is answered "no," an agency may request a short explanation for this response.

	YES	NO
1. *LAND USE, ZONING, AND PUBLIC POLICY*: CEQR Technical Manual Chapter 4		
(a) Would the proposed project result in a change in land use different from surrounding land uses?	☐	☒
(b) Would the proposed project result in a change in zoning different from surrounding zoning?	☒	☐
(c) Is there the potential to affect an applicable public policy?	☐	☒
(d) If "yes," to (a), (b), and/or (c), complete a preliminary assessment and attach. See Attachment B		
(e) Is the project a large, publicly sponsored project?	☐	☒
○ If "yes," complete a PlaNYC assessment and attach.		
(f) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries?	☐	☒
○ If "yes," complete the Consistency Assessment Form.		
2. *SOCIOECONOMIC CONDITIONS*: CEQR Technical Manual Chapter 5		
(a) Would the proposed project:		
○ Generate a net increase of 200 or more residential units?	☐	☒
○ Generate a net increase of 200,000 or more square feet of commercial space?	☐	☒
○ Directly displace more than 500 residents?	☐	☒
○ Directly displace more than 100 employees?	☐	☒
○ Affect conditions in a specific industry?	☐	☒
3. *COMMUNITY FACILITIES*: CEQR Technical Manual Chapter 6		
(a) Direct Effects		
○ Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?	☐	☒
(b) Indirect Effects		
○ **Child Care Centers:** Would the project result in 20 or more eligible children under age 6, based on the number of low or low/moderate income residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Libraries:** Would the project result in a 5 percent or more increase in the ratio of residential units to library branches? (See Table 6-1 in Chapter 6)	☐	☒
○ **Public Schools:** Would the project result in 50 or more elementary or middle school students, or 150 or more high school students based on number of residential units? (See Table 6-1 in Chapter 6)	☐	☒
○ **Health Care Facilities and Fire/Police Protection:** Would the project result in the introduction of a sizeable new neighborhood?	☐	☒
4. *OPEN SPACE*: CEQR Technical Manual Chapter 7		
(a) Would the proposed project change or eliminate existing open space?	☐	☒
(b) Is the project located within an under-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 50 additional residents or 125 additional employees?	☐	☐
(c) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?	☐	☒
○ If "yes," would the proposed project generate more than 350 additional residents or 750 additional employees?	☐	☐
(d) If the project in located an area that is neither under-served nor well-served, would it generate more than 200 additional residents or 500 additional employees?	☒	☐

	YES	NO
5. *SHADOWS*: CEQR Technical Manual Chapter 8		
(a) Would the proposed project result in a net height increase of any structure of 50 feet or more?	☒	☐
(b) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?	☐	☒
6. *HISTORIC AND CULTURAL RESOURCES*: CEQR Technical Manual Chapter 9		
(a) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; that is listed or eligible for listing on the New York State or National Register of Historic Places; or that is within a designated or eligible New York City, New York State or National Register Historic District? (See the GIS System for Archaeology and National Register to confirm)	☐	☒
(b) Would the proposed project involve construction resulting in in-ground disturbance to an area not previously excavated?	☒	☐
(c) If "yes" to either of the above, list any identified architectural and/or archaeological resources and attach supporting information on whether the proposed project would potentially affect any architectural or archeological resources. See Attachment E / Appendix A		
7. *URBAN DESIGN AND VISUAL RESOURCES*: CEQR Technical Manual Chapter 10		
(a) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?	☒	☐
(b) Would the proposed project result in obstruction of publicly accessible views to visual resources not currently allowed by existing zoning?	☐	☒
8. *NATURAL RESOURCES*: CEQR Technical Manual Chapter 11		
(a) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11?	☐	☒
○ If "yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.		
(b) Is any part of the directly affected area within the Jamaica Bay Watershed?	☐	☒
○ If "yes," complete the Jamaica Bay Watershed Form, and submit according to its instructions.		
9. *HAZARDOUS MATERIALS*: CEQR Technical Manual Chapter 12		
(a) Would the proposed project allow commercial or residential uses in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?	☐	☒
(b) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?	☐	☒
(c) Would the project require soil disturbance in a manufacturing area or any development on or near a manufacturing area or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?	☒	☐
(d) Would the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	☒	☐
(e) Would the project result in development on or near a site that has or had underground and/or aboveground storage tanks (*e.g.*, gas stations, oil storage facilities, heating oil storage)?	☒	☐
(f) Would the project result in renovation of interior existing space on a site with the potential for compromised air quality; vapor intrusion from either on-site or off-site sources; or the presence of asbestos, PCBs, mercury or lead-based paint?	☐	☒
(g) Would the project result in development on or near a site with potential hazardous materials issues such as government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, coal gasification or gas storage sites, railroad tracks or rights-of-way, or municipal incinerators?	☐	☒
(h) Has a Phase I Environmental Site Assessment been performed for the site?	☒	☐
○ If "yes," were Recognized Environmental Conditions (RECs) identified? Briefly identify: See Attachment G. Historic presence of underground and above-ground storage tanks on the Development Site; Historic uses of the Development Site included upholstering, a plumbing and heating business, a paint shop, auto repair, and manufacturing.	☒	☐
10. *WATER AND SEWER INFRASTRUCTURE*: CEQR Technical Manual Chapter 13		
(a) Would the project result in water demand of more than one million gallons per day?	☐	☒
(b) If the proposed project located in a combined sewer area, would it result in at least 1,000 residential units or 250,000 square feet or more of commercial space in Manhattan, or at least 400 residential units or 150,000 square feet or more of commercial space in the Bronx, Brooklyn, Staten Island, or Queens?	☐	☒
(c) If the proposed project located in a separately sewered area, would it result in the same or greater development than the amounts listed in Table 13-1 in Chapter 13?	☐	☐
(d) Would the proposed project involve development on a site that is 5 acres or larger where the amount of impervious surface would increase?	☐	☒

	YES	NO
(e) If the project is located within the Jamaica Bay Watershed or in certain specific drainage areas, including Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek, would it involve development on a site that is 1 acre or larger where the amount of impervious surface would increase?	☐	☒
(f) Would the proposed project be located in an area that is partially sewered or currently unsewered?	☐	☒
(g) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a Wastewater Treatment Plant and/or generate contaminated stormwater in a separate storm sewer system?	☐	☒
(h) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?	☐	☒
11. *SOLID WASTE AND SANITATION SERVICES*: CEQR Technical Manual Chapter 14		
(a) Using Table 14-1 in Chapter 14, the project's projected operational solid waste generation is estimated to be (pounds per week): Residential: 41 lbs/week/household x 487 households = 19,967 lbs/week Retail: 79 lbs/week/employee x 75 employees = 5,925 lbs/week Medical Office: 9 lbs/week/employee x 6 employees = 54 lbs/week Total: 25,946 lbs/week		
○ Would the proposed project have the potential to generate 100,000 pounds (50 tons) or more of solid waste per week?	☐	☒
(b) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?	☐	☒
12. *ENERGY*: CEQR Technical Manual Chapter 15		
(a) Using energy modeling or Table 15-1 in Chapter 15, the project's projected energy use is estimated to be (annual BTUs): Residential: 126.7 MBtu/sf/year x 420,876 gsf = 53,324,989 MBtu/year Retail: 216.3 MBtu/sf/year x 22,285 gsf = 4,820,245 MBtu/year Medical Office: 250.7 MBtu/sf/year x 1,128 sf = 282,786 MBtu/year Total: 58,428,020 MBtu/year		
(b) Would the proposed project affect the transmission or generation of energy?	☐	☒
13. *TRANSPORTATION*: CEQR Technical Manual Chapter 16		
(a) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	☒	☐
(b) If "yes," conduct the screening analyses, attach appropriate back up data as needed for each stage and answer the following questions:		
○ Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour?	☐	☒
If "yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? ***It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peak hour. See Subsection 313 of Chapter 16 for more information.*	☐	☐
○ Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour?	☐	☒
If "yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?	☐	☐
○ Would the proposed project result in more than 200 pedestrian trips per project peak hour?	☒	☐
If "yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?	☒	☐
14. *AIR QUALITY*: CEQR Technical Manual Chapter 17		
(a) *Mobile Sources*: Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?	☐	☒
(b) *Stationary Sources*: Would the proposed project result in the conditions outlined in Section 220 in Chapter 17?	☒	☐
○ If "yes," would the proposed project exceed the thresholds in Figure 17-3, Stationary Source Screen Graph in Chapter 17? (Attach graph as needed) See Attachment I	☐	☒
(c) Does the proposed project involve multiple buildings on the project site?	☐	☒
(d) Does the proposed project require federal approvals, support, licensing, or permits subject to conformity requirements?	☐	☒
(e) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?	☐	☒
15. *GREENHOUSE GAS EMISSIONS*: CEQR Technical Manual Chapter 18		
(a) Is the proposed project a city capital project or a power generation plant?	☐	☒
(b) Would the proposed project fundamentally change the City's solid waste management system?	☐	☒
(c) If "yes" to any of the above, would the project require a GHG emissions assessment based on the guidance in Chapter 18?	☐	☐

	YES	NO
16. *NOISE*: CEQR Technical Manual Chapter 19		
(a) Would the proposed project generate or reroute vehicular traffic?	☒	☐
(b) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?	☒	☐
(c) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?	☐	☒
(d) Does the proposed project site have existing institutional controls (*e.g.*, (E) designation or Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?	☐	☒
17. *PUBLIC HEALTH*: CEQR Technical Manual Chapter 20		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Air Quality; Hazardous Materials; Noise?	☐	☒
(b) If "yes," explain why an assessment of public health is or is not warranted based on the guidance in Chapter 20, "Public Health." Attach a preliminary analysis, if necessary. As described in the EAS attachments, detailed analyses for noise and air quality were completed. Through the mapping of an (E) Designation related to hazardous materials and noise, measures to preclude impacts would be included as part of construction and/or operation of the Proposed Development. No unmitigated significant adverse impacts would occur with respect to hazardous materials, noise, and air quality. Therefore, a public health assessement is not warranted.		
18. *NEIGHBORHOOD CHARACTER*: CEQR Technical Manual Chapter 21		
(a) Based upon the analyses conducted, do any of the following technical areas require a detailed analysis: Land Use, Zoning, and Public Policy; Socioeconomic Conditions; Open Space; Historic and Cultural Resources; Urban Design and Visual Resources; Shadows; Transportation; Noise?	☒	☐
(b) If "yes," explain why an assessment of neighborhood character is or is not warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary. An assessment of neighborhood character is generally warranted when a proposed project has the potential to result in significant adverse impacts in one of the elements that define a neighborhood's character or when a project may have moderate effects on several of the elements. Neighborhood character is determined by a number of factors, such as land use, urban design, visual resources, historic resources, socioeconomic conditions, traffic, and noise. The Proposed Actions would not substantively affect one or more of these elements. Therefore, an assessment of neighborhood character is not warranted.		
19. *CONSTRUCTION*: CEQR Technical Manual Chapter 22		
(a) Would the project's construction activities involve:		
○ Construction activities lasting longer than two years?	☐	☒
○ Construction activities within a Central Business District or along an arterial highway or major thoroughfare?	☐	☒
○ Closing, narrowing, or otherwise impeding traffic, transit, or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, *etc.*)?	☒	☐
○ Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out?	☐	☒
○ The operation of several pieces of diesel equipment in a single location at peak construction?	☐	☒
○ Closure of a community facility or disruption in its services?	☐	☒
○ Activities within 400 feet of a historic or cultural resource?	☐	☒
○ Disturbance of a site containing or adjacent to a site containing natural resources?	☐	☒
○ Construction on multiple development sites in the same geographic area, such that there is the potential for several construction timelines to overlap or last for more than two years overall?	☐	☒
(b) If any boxes are checked "yes," explain why a preliminary construction assessment is or is not warranted based on the guidance in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination. See Attachment A Screening Analysis.		

20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of the pertinent books and records and/or after inquiry of persons who

have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the applicant or representative of the entity that seeks the permits, approvals, funding, or other governmental action(s) described in this EAS.

APPLICANT/REPRESENTATIVE NAME	DATE
Aaron Werner, AICP – Technical Director, AKRF, Inc.	March 5, 2021

SIGNATURE



PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

Part III: DETERMINATION OF SIGNIFICANCE (To Be Completed by Lead Agency)

INSTRUCTIONS: In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY § 6-06 (Executive Order 91 or 1977, as amended), which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

IMPACT CATEGORY	Potentially Significant Adverse Impact YES	NO
Land Use, Zoning, and Public Policy	☐	☒
Socioeconomic Conditions	☐	☒
Community Facilities and Services	☐	☒
Open Space	☐	☒
Shadows	☐	☒
Historic and Cultural Resources	☐	☒
Urban Design/Visual Resources	☐	☒
Natural Resources	☐	☒
Hazardous Materials	☐	☒
Water and Sewer Infrastructure	☐	☒
Solid Waste and Sanitation Services	☐	☒
Energy	☐	☒
Transportation	☐	☒
Air Quality	☐	☒
Greenhouse Gas Emissions	☐	☒
Noise	☐	☒
Public Health	☐	☒
Neighborhood Character	☐	☒
Construction	☐	☒

2. Are there any aspects of the project relevant to the determination of whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? ☐ YES ☒ NO

If there are such impacts, attach an explanation stating whether, as a result of them, the project may have a significant impact on the environment.

3. Check determination to be issued by the lead agency:

☐ **Positive Declaration**: If the lead agency has determined that the project may have a significant impact on the environment, and if a Conditional Negative Declaration is not appropriate, then the lead agency issues a *Positive Declaration* and prepares a draft Scope of Work for the Environmental Impact Statement (EIS).

☐ **Conditional Negative Declaration:** A *Conditional Negative Declaration* (CND) may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements of 6 NYCRR Part 617.

☒ **Negative Declaration:** If the lead agency has determined that the project would not result in potentially significant adverse environmental impacts, then the lead agency issues a *Negative Declaration*. The *Negative Declaration* may be prepared as a separate document (see template) or using the embedded Negative Declaration on the next page.

4. ***LEAD AGENCY'S CERTIFICATION***

TITLE Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning, on behalf of the City Planning Commission
NAME Olga Abinader	DATE April 2, 2021
SIGNATURE	

NEGATIVE DECLARATION

Statement of No Significant Effect

Pursuant to Executive Order 91 of 1977, as amended, and the Rules of Procedure for City Environmental Quality Review, found at Title 62, Chapter 5 of the Rules of the City of New York and 6 NYCRR, Part 617, State Environmental Quality Review, the Department of City Planning acting on behalf of the City Planning Commission assumed the role of lead agency for the environmental review of the proposed actions. Based on a review of information about the project contained in this environmental assessment statement (EAS) and any attachments hereto, which are incorporated by reference herein, the lead agency has determined that the proposed actions would not have a significant adverse impact on the environment.

Reasons Supporting this Determination

The above determination is based on information contained in this EAS, which finds the proposed actions sought before the City Planning Commission would not have a significant adverse impact on the environment. Reasons supporting this determination are noted below.

Land Use, Zoning, and Public Policy

A detailed analysis of land use, zoning, and public policy is included in the EAS. The proposed actions include a Zoning Map Amendment to rezone the project area (Brooklyn Block 1778, Lot 55, and an approximately 1.83-foot wide portion of adjacent Lot 49) from an R7A district to an R8A/C2-4 district and a Zoning Text Amendment to establish a Mandatory Inclusionary Housing area over the project area in the Bedford-Stuyvesant neighborhood of Brooklyn, Community District 3. The Project Area is located on the eastern portion of Brooklyn Block 1778, extending 240 feet west of Nostrand Avenue, between DeKalb Avenue to the north and Kosciuszko Street to the south. The proposed actions would facilitate the development of an approximately 445,085 gross square feet ("gsf") mixed-use building containing 421,679 gsf of residential uses (487 dwelling units, 144 of which would be affordable pursuant to MIH), 22,272 gsf of commercial uses, and 1,134 gsf of community facility uses with attended parking for 176 spaces. Compared to the no-action condition, the proposed actions would result in the same land uses, but at a higher density. The land uses of the proposed project (residential, commercial, and community facility uses) would be consistent with that of the surrounding area. The analysis shows that while the zoning of the project area would change from R7A to R8A/C2-4, the proposed actions would not result in changes to the zoning or land use patterns in the surrounding area. In addition, the proposed actions would not conflict with applicable public policy goals. Therefore, the proposed actions would not result in significant adverse impacts to land use, zoning and public policy.

Shadows

A detailed analysis of shadows is included in this EAS. The shadows analysis finds the potential for shadows to be cast on nearby Kosciuszko Pool. Kosciuszko Pool is a public pool that is 2.39 acres in size, the majority of which is dedicated to active swimming uses (approximately 90 percent). The pool is in good condition and is highly utilized when open for the season. Kosciuszko Pool is closed on the winter analysis day and the March 21/September 21 analysis days. The detailed shadows analysis finds that incremental shadow would fall beyond the pool's western wall onto a portion of the concrete deck near the wading pool at the western end of the open space for the final minute of the May 6/August 5 analysis day. The shadows analysis concludes that the brief duration and limited extent of incremental shadow at the end of the analysis day would not significantly impact the use of this open space. Therefore, the Proposed Actions would not have the potential to result in significant adverse impacts related to shadows.

Urban Design and Visual Resources

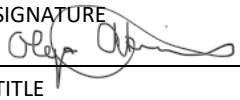
A detailed analysis of urban design and visual resources is included in this EAS. With respect to urban design, the analysis finds the height of the Proposed Development (at 145 feet on Dekalb and Nostrand Avenues, and 125 feet along Kosciuszko Street would be taller than any building in the study area, but would be similar to the 12-story building at the western edge of the project block (at 31 Kosciuszko Street), which is 135 feet tall. The Proposed Building would be 30-to-50 feet taller than the No Action Development. Similar to the No-Action Development, the Proposed Development would provide a continuous streetwall. With respect to visual resources, The Proposed Development would be notable in views along surrounding streets, particularly along Dekalb and Nostrand Avenues and Kosciuszko Street; however, in these views, the height and scale of the Proposed Development would have a similar appearance to the No Action Development. The Proposed Development would not obstruct any existing view corridors, and would not obstruct or eliminate views to any visual landmarks in the surrounding area. The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource. Therefore, the Proposed Actions would not have the potential to result in significant adverse impacts related to urban design and visual resources.

Air Quality and Noise

An (E) designation (E-606) related to air quality and noise would be established as part of the approval of the proposed actions. Refer to "Determination of Significance Appendix: (E) designation" for the applicable (E) designation requirements. The air quality and noise analyses conclude that with the (E) designation in place, the proposed actions would not result in a significant adverse impact related to air quality or noise.

No other significant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA). Should you have any questions pertaining to this Negative Declaration, you may contact Anthony Howard at +1 212-720-3422.

Project Name: 270 Nostrand Avenue Rezoning
CEQR # 21DCP043K
SEQRA Classification: Unlisted

TITLE Director, Environmental Assessment and Review Division	LEAD AGENCY Department of City Planning on behalf of the City Planning Commission 120 Broadway, 31st Fl. New York, NY 10271 | 212.720.3493
NAME Olga Abinader	DATE April 2, 2021
SIGNATURE 	
TITLE Chair, City Planning Commission	
NAME Marisa Lago	DATE April 5, 2021
SIGNATURE	

Project Name: 270 Nostrand Avenue Rezoning
CEQR # 21DCP043K
SEQRA Classification: Unlisted

Determination of Significance Appendix

The Proposed Action(s) were determined to have the potential to result in changes to development on the following site(s):

Development Site	Borough	Block and Lot
Projected Development Site 1	Brooklyn	Block 1778, Lot 55

(E) Designation Requirements

To ensure that the proposed actions would not result in significant adverse impacts related to air quality and noise an (E) designation (**E-606**) would be established as part of approval of the proposed actions on **Projected Development Site 1** as described below:

Development Site	Hazardous Materials	Air Quality	Noise
Projected Development Site 1		X	X

Air Quality

The (E) designation requirements for noise would apply as follows:

> ***Projected Development Site 1: Any new residential and/or commercial development on the above referenced property must exclusively use natural gas as the type of fuel for HVAC systems and hot water equipment, and ensure that the heating, ventilating and air conditioning and/or the hot water equipment stack(s) is located at the highest tier, at least 160 feet above grade, and no more than 35 feet from the lot line facing Nostrand Avenue to avoid any potential significant adverse air quality impacts.***

Noise

The (E) designation requirements for noise would apply as follows:

> ***Projected Development Site 1: Block 1778, Lot 55: In order to ensure an acceptable interior noise environment, future residential, community facility, and commercial development must provide minimum composite building façade attenuation as shown in Table J-5, in order to maintain an interior L10 noise level not greater than 45 dBA for residential and community facility***

A. INTRODUCTION

The Applicant, BRP East Brooklyn Development LLC,[1] is seeking approval of two actions (the "Proposed Actions") subject to City Planning Commission (CPC) approval to facilitate the development of an approximately 444,289-gross-square-foot (gsf) mixed-use building containing residential, commercial, and community facility uses with attended parking (the "Proposed Development") at 270 Nostrand Avenue (Block 1778, Lot 55 – the "Development Site") in the Bedford Stuyvesant neighborhood of Brooklyn, Community District 3.

B. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The area directly affected by the Proposed Actions consists of the Development Site (Block 1778, Lot 55) and an approximately 1.83-foot wide portion of the adjacent lot to the west (Block 1778, Lot 49), herein referred to as the "Project Area" or "Rezoning Area" (see Figures 1-6 of the Environmental Assessment Statement [EAS] Short Form).

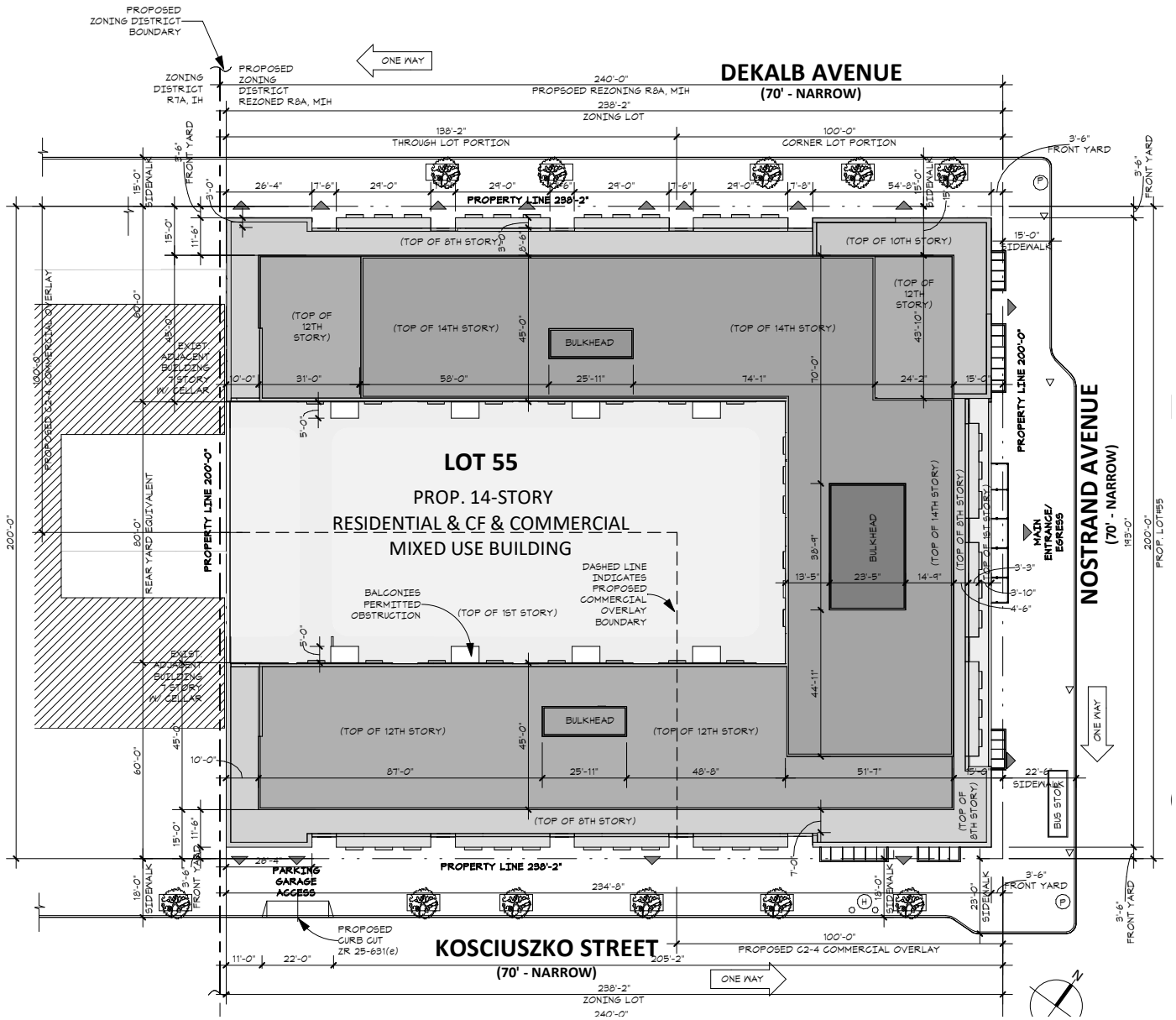
The Development Site, 270 Nostrand Avenue (Block 1778, Lot 55), is located on the west side of Nostrand Avenue between DeKalb Avenue to the north and Kosciuszko Street to the south. The currently vacant Development Site measures approximately 47,634 square feet (sf) in size.

The Proposed Development is an approximately 444,289-gsf (7.2 FAR) mixed-use building containing approximately 487 dwelling units (DU), approximately 22,285 gsf of local retail space on the cellar and ground floors, and approximately 1,128 gsf of ground floor community facility space (assumed as a medical office use). The Proposed Development would be 14 stories tall and approximately 145 feet in height to the top of the roof, in compliance with the R8A district's height limit pursuant to ZR Section 23-664(b). Accounting for rooftop mechanical bulkheads, the Proposed Development would reach a maximum height of approximately 154 feet.

The massing of the Proposed Development is designed to relate to the surrounding context. The Proposed Development would rise to 14 stories along Dekalb and Nostrand Avenues, which are busy retail corridors, but step down to 12 stories along Kosciusko Street as a gesture toward the lower-rise neighborhood to the south of the Development Site. The 14-story portion of the building would reach a roof height of 145 feet, and the 12-story portion will be 20 feet lower, at 125 feet in height. Setbacks of 15 feet would be provided on all three sides of the building at a height of 85 feet (see **Figures A-1 through A-3**).

Of the 487 residential units proposed on the Development Site, the Applicant envisions that 30 percent (144 units) would be affordable housing units for households earning a weighted average of 115 percent of Area Median Income (AMI), pursuant to the Workforce Housing option of the

[1] NNRC Properties LLC is the current owner of the Development Site. The Applicant, BRP East Brooklyn Development LLC, is the contract vendee.

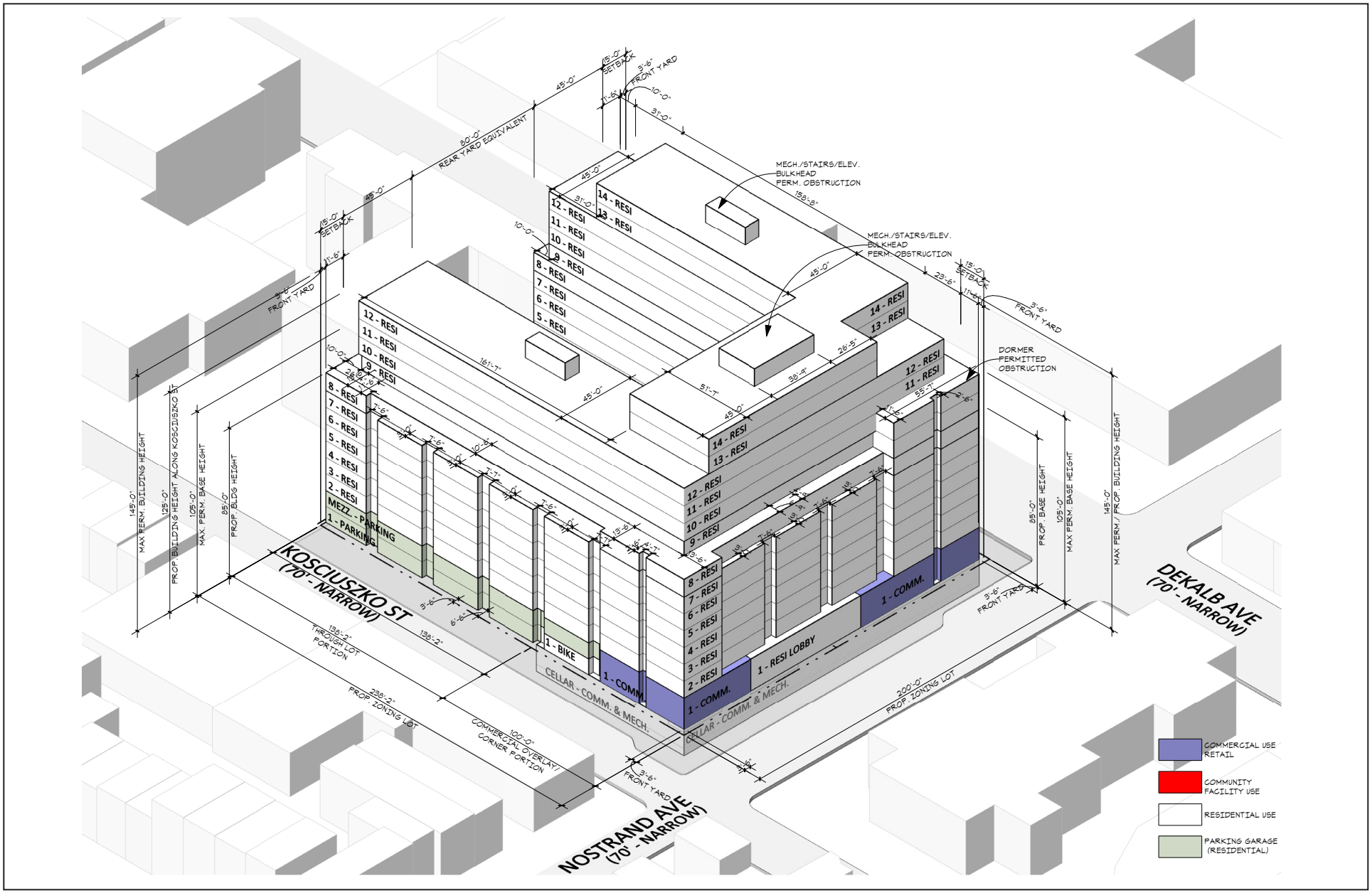


Source: GF55 Partners

Proposed Development — Site Plan

270 NOSTRAND AVENUE

Figure A-1



Source: GF55 Partners

Proposed Development — Conceptual Massing

270 NOSTRAND AVENUE

Figure A-2

11.23.20



Source: GF55 Partners

Proposed Development — Perspective Rendering

270 NOSTRAND AVENUE

Figure A-3

Mandatory Inclusionary Housing (MIH) program, and the remaining 70 percent (343 units) would be market rate.

Pursuant to Section 23-154(d)(3) of the Zoning Resolution, the Workforce Option of the MIH program must always be mapped and made available in combination with either MIH Option 1 or Option 2. The Applicant proposes to map the Workforce Option in combination with Option 2 within the MIH area. Option 2 requires that, for new developments, an amount of affordable floor area equivalent to at least 30 percent of the residential floor area within the development be provided, with the weighted average of all income bands not exceeding 80 percent of AMI, no more than three income bands provided, and no income band exceeding 130 percent of the income index.

The Proposed Development will contain 176 parking spaces on the first floor and mezzanine of the building, accessible through a 22-foot-wide curb cut located on Kosciuszko Street, approximately 205 feet west of Nostrand Avenue and approximately 11 feet east of Lot 49. The Applicant anticipates that 144 units will be affordable pursuant to the MIH program and therefore not subject to parking requirements (although the EAS is assuming a smaller number of units at or below 80 percent of AMI – see below). The remaining 343 dwelling units are subject to a 40 percent parking requirement and therefore 137 parking spaces would be required. Since there would be approximately 11 spaces required by the proposed retail floor area, the parking requirement for retail uses would be waived pursuant to ZR Section 36-232.

Since a determination on the MIH Option for the Proposed Development will not be finalized until the Proposed Actions certify into the Uniform Land Use Review Procedure (ULURP) and proceed through the public review process, the EAS will assume that 20 percent of the proposed residential floor area (approximately 84,175 gsf) would be affordable to households earning up to 80 percent of AMI. This translates to approximately 99 units affordable at or below 80 percent of AMI, based on DCP's guidance on average unit size for affordable housing (850 gsf).

C. PROPOSED ACTIONS

The following actions are necessary to facilitate the Proposed Project:

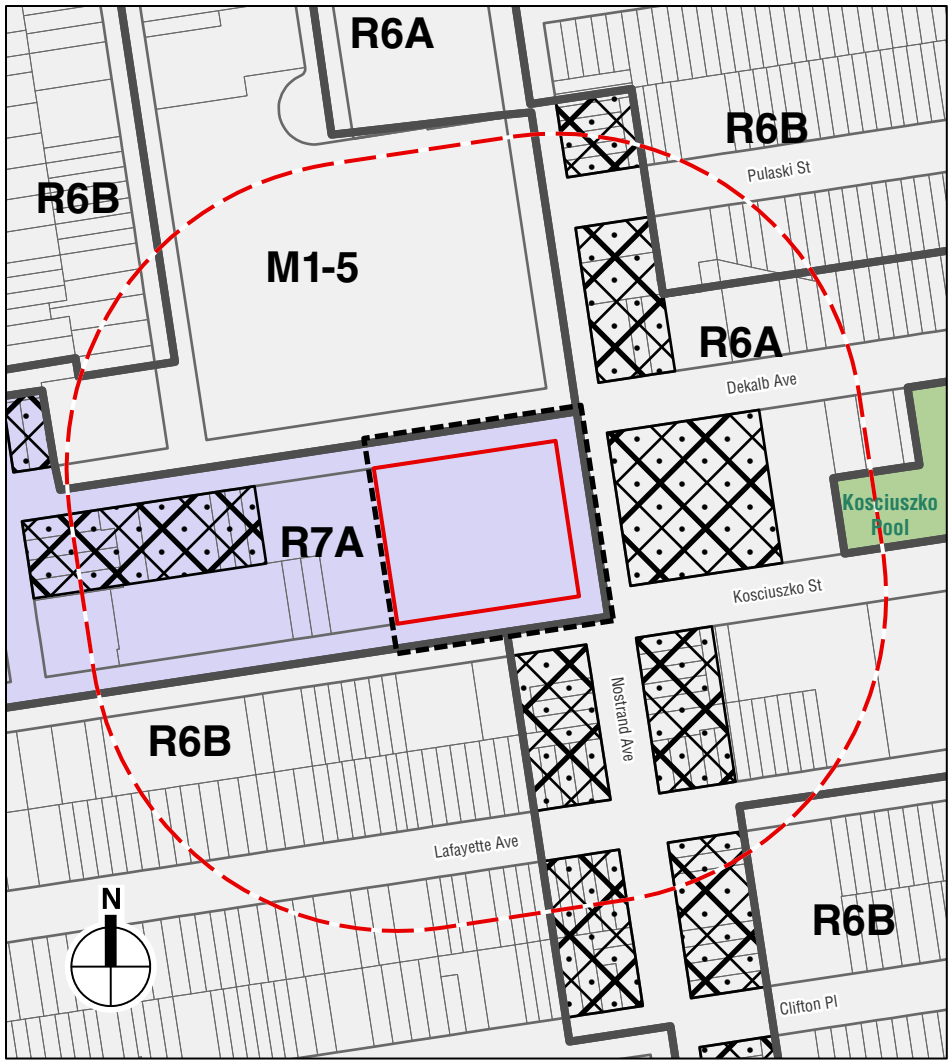
- An amendment to Zoning Map 17a to rezone the area within 240 feet of Nostrand Avenue from an R7A zoning district to an R8A zoning district, and to map a C2-4 commercial overlay within 100 feet of Nostrand Avenue and extending 240 feet within 100 feet of Dekalb Avenue (comprising the Development Site, and an approximately 1.83-foot-wide portion of Lot 49, and referred to as the "Rezoning Area" and/or the "Project Area") (see **Figure A-4**).
- A Zoning Text Amendment to Appendix F of the Zoning Resolution to designate the Project Area as a Mandatory Inclusionary Housing Area (see **Figure A-5**).

The above-referenced actions are subject to approval by the CPC pursuant to ULURP.

D. PURPOSE AND NEED

Approval of the Proposed Actions would allow the Applicant to construct the Proposed Development as described above, which would include approximately 487 residential units (affordable and market rate housing) along with ground floor retail and community facility space. Block 1778, unlike the surrounding blocks, does not contain a commercial overlay or commercial uses along Nostrand and Dekalb Avenues. The Proposed Development would redevelop a currently vacant site within close proximity to public transportation with a mix of uses consistent with those found on neighboring blocks.

12.10.19



Existing Zoning



Proposed Zoning

Data source: NYC Dept. of City Planning GIS Zoning Features, September 2019

Development Site
Study Area (400-foot perimeter)
Rezoning Area
Zoning District Boundaries
C2-4 Commercial Overlay District
Voluntary Inclusionary Housing Designated Area
Mandatory Inclusionary Housing Designated Area

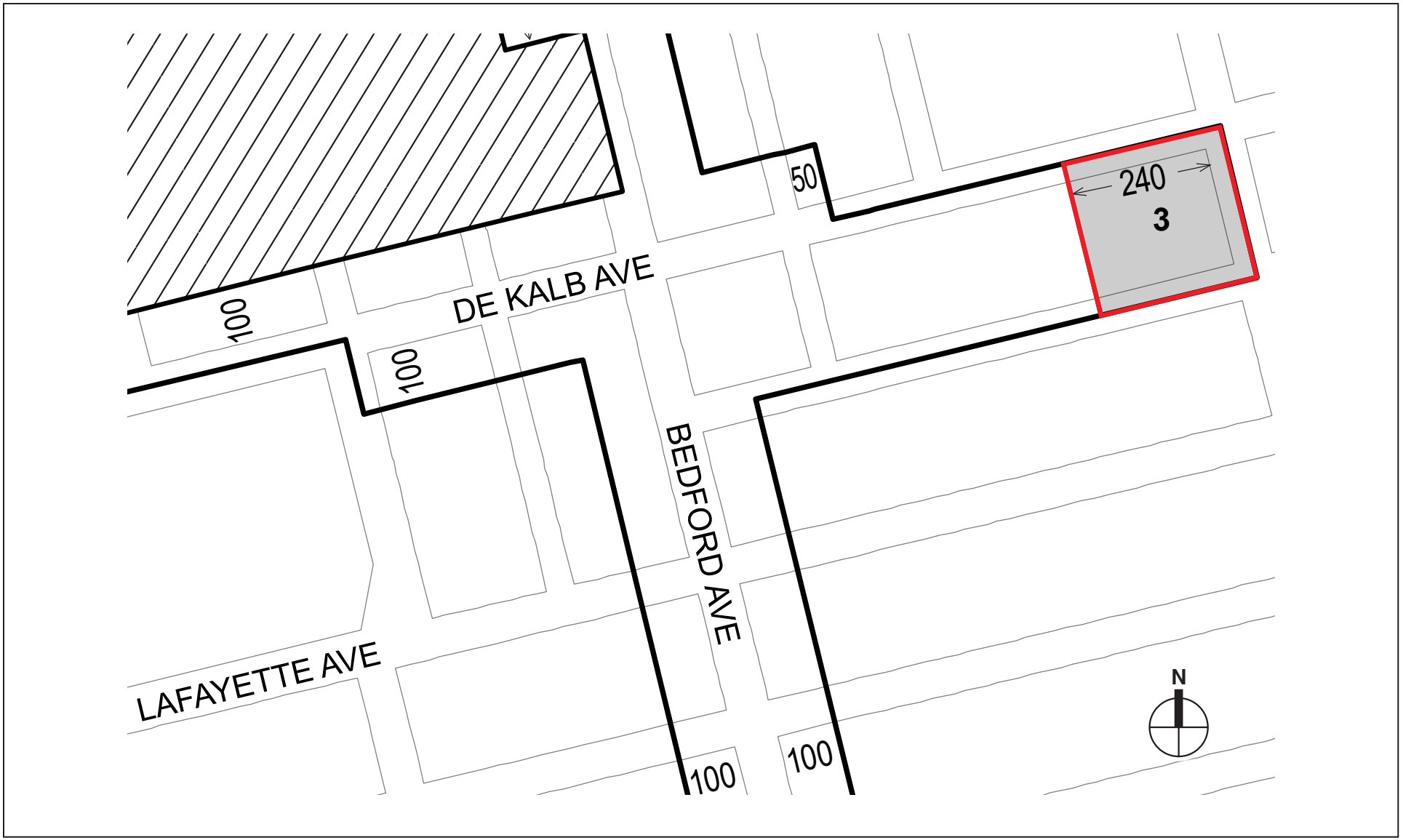
0 400 FEET

Existing and Proposed Zoning

Figure A-4

270 NOSTRAND AVENUE

11.23.20



Development Site

Proposed MIH Text Amendment — ZR Appendix F

270 NOSTRAND AVENUE

Figure A-5

The Proposed Development would conform with the MIH program, creating much needed affordable housing units and providing the Proposed Development with an increase in allowable FAR (up to 7.2 FAR) to facilitate development above what is permitted under the current zoning. The inclusion of affordable housing is in keeping with both the Housing New York 2.0 initiative introduced by the de Blasio administration to build or preserve 300,000 affordable residential units by 2026. In sum, the Applicant believes that by increasing the maximum permitted floor area and providing active ground-floor retail complementary to existing adjacent retail uses, the Proposed Development would benefit the neighborhood greatly and achieve important public policy objectives.

E. FRAMEWORK FOR ANALYSIS

This document has been prepared in accordance with the guidelines presented in the 2014 *City Environmental Quality Review (CEQR) Technical Manual.* The Proposed Project is expected to be completed and in operation by 2023, which is the build year or analysis year. For each technical area, the analysis includes a description of existing conditions and an assessment of conditions in the future with and without the Proposed Actions by 2023.

EXISTING CONDITIONS

The analysis framework begins with an assessment of existing conditions on the Development Site and surrounding neighborhood because these can be most directly measured and observed. The assessment of existing conditions does not represent the condition against which the Proposed Development is measured, but generally serves as a starting point for the projection of future conditions with and without the Proposed Actions and analysis of project impacts.

DEVELOPMENT SITE

The Development Site is currently zoned R7A (within a Voluntary Inclusionary Housing designated area) and consists of approximately 47,634 sf of vacant land.

REMAINDER OF PROJECT AREA (PORTION OF LOT 49)

A minimal (approximately 1.83-foot-wide) portion of Lot 49, which is currently zoned R7A, would be mapped R8A/C2-4 as part of the Proposed Actions. Lot 49 is currently occupied by an existing seven-story, 111-unit senior housing building constructed in 1984 and most recently renovated in 2014. The 2014 building renovation was followed by the execution of a Regulatory Agreement between the owner, CABS Senior Housing LP/CABS Senior Housing Development Fund Company, Inc. and the New York City Department of Housing Preservation and Development (HPD) to preserve affordability for a term of 40 years.

THE FUTURE WITHOUT THE PROPOSED ACTIONS

DEVELOPMENT SITE

In the future absent the Proposed Actions, the Applicant is likely to develop an as-of-right residential and community facility building on the Development Site consistent with the site's existing R7A zoning district (the No Action Development). The No Action Development would be nine stories (approximately 95 feet) tall with approximately 249,465 gsf of residential floor area (approximately 305 dwelling units) and approximately 25,060 gsf of community facility space (assumed as a medical office use) on the ground floor and cellar levels. Since the Development Site is currently located in a Voluntary Inclusionary Housing designated area, the No Action Development could include 61 affordable units (20 percent) and 244 market rate units

(80 percent) in accordance with the Voluntary IHP, in which case parking would be required for 50 percent of the market rate units (122 spaces) (see **Figures A-6 and A-7**).

REMAINDER OF PROJECT AREA (PART OF LOT 49)

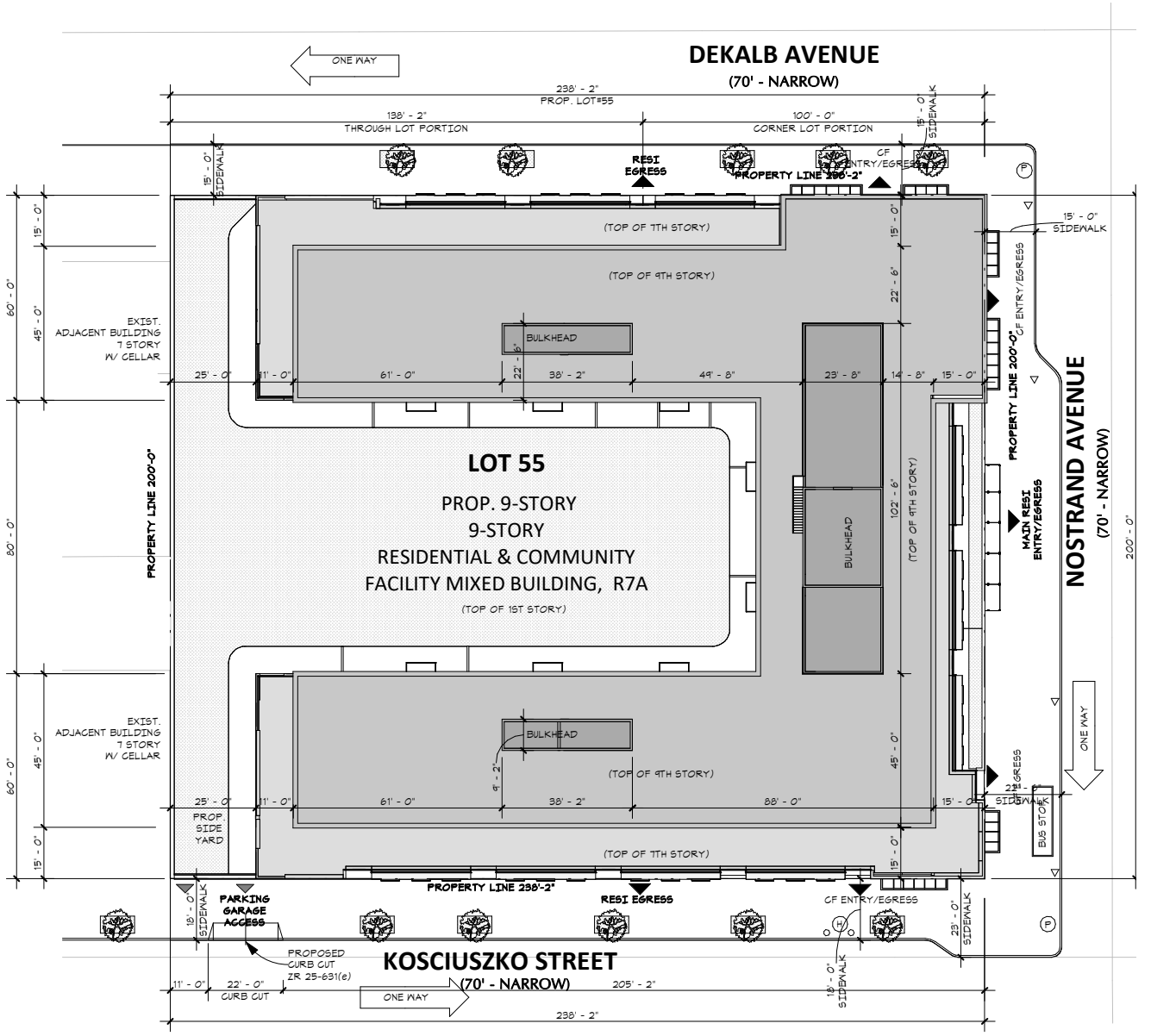
In the future without the Proposed Actions, the existing conditions noted above for Lot 49 are expected to remain. As described above, Lot 49 includes a recently renovated senior housing building that is subject to a Regulatory Agreement with HPD for the preservation of affordable housing over a period of 40 years. Therefore, it is highly unlikely that any changes would occur on Lot 49 absent the Proposed Actions by 2023.

THE FUTURE WITH THE PROPOSED ACTIONS

DEVELOPMENT SITE

With the Proposed Actions, the Development Site would be redeveloped with the Proposed Development, a mixed-use building containing residential, retail, and community facility uses. As described above, the Proposed Development would consist of an approximately 444,288-gsf (7.2 FAR) mixed-use building containing approximately 487 DUs, approximately 22,285 gsf of local retail space on the cellar and ground floors, approximately 1,128 gsf of ground floor community facility space (assumed as a medical office use), and 176 attended parking spaces on the first floor, mezzanine, and cellar levels. The Proposed Development would be 14 stories tall and approximately 145 feet in height to the top of the roof, in compliance with the R8A district's height limit pursuant to ZR Section 23-664(b). Accounting for the rooftop mechanical bulkheads, the Proposed Development would reach a maximum height of approximately 154 feet.

As indicated in **Table A-1**, the increment or difference between the No Action and With Action conditions for the Development Site, to be analyzed in the EAS, would be a net increase of approximately 171,411 gsf of residential space (approximately 182 total dwelling units and 34 affordable dwelling units); a net increase of approximately 22,285 gsf of commercial space; a net decrease of approximately 23,932 gsf of community facility space, a net increase of approximately 54 parking spaces; and a net increase in building height of approximately 59 feet.

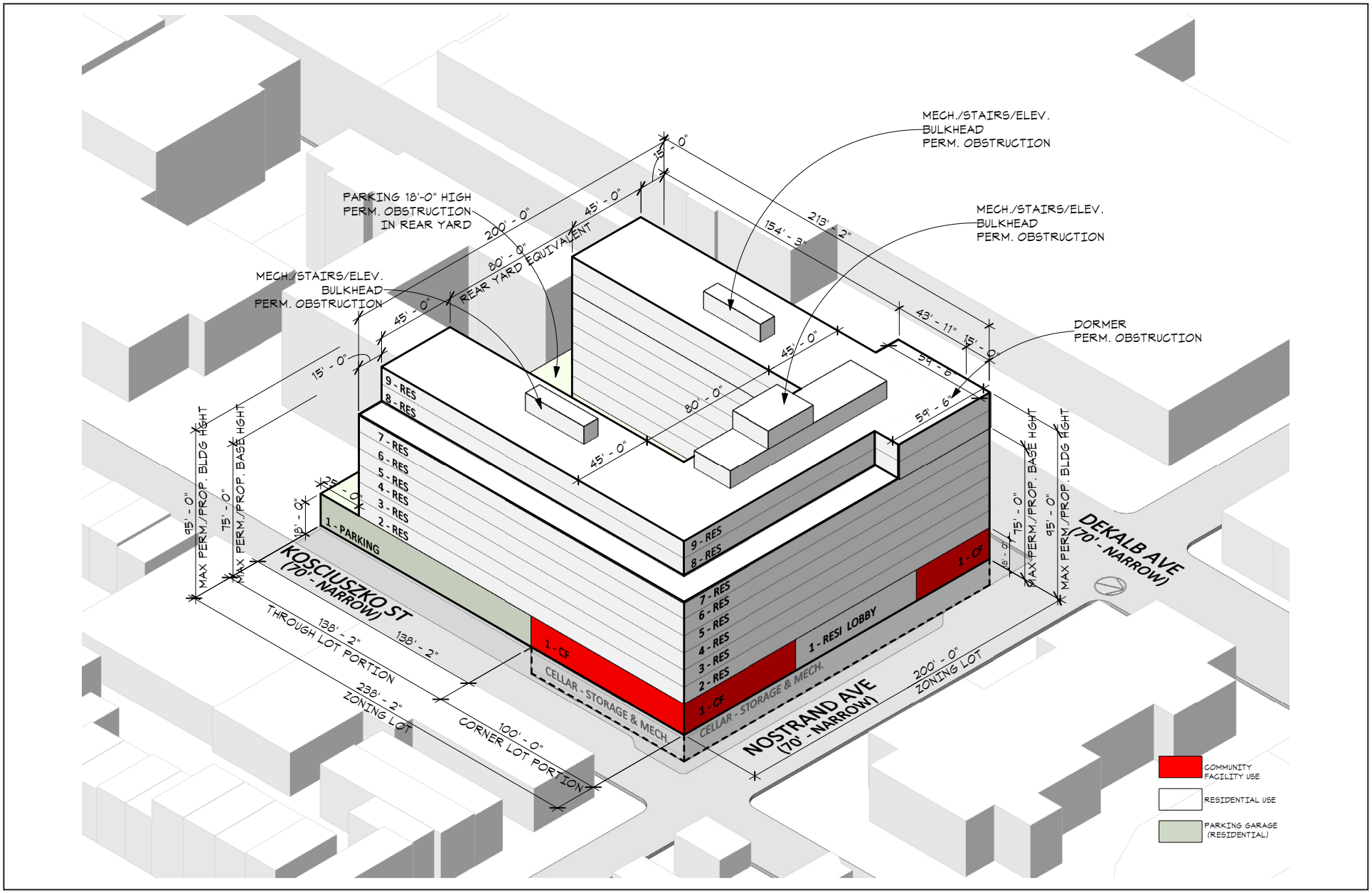


Source: GF55 Partners

No-Action Development — Conceptual Site Plan

270 NOSTRAND AVENUE

Figure A-6



Source: GF55 Partners

No-Action Development — Conceptual Massing

270 NOSTRAND AVENUE

Figure A-7

Table A-1
Reasonable Worst-Case Development Scenario (RWCDS) – Development Site

Components	Existing Condition	Future No Action Condition (As-of-Right)	Future With Action Condition (Proposed Development)	Increment
Residential (gsf)	N/A	249,465	420,876	+171,411
Dwelling Units (total)	N/A	305	487	+182
Dwelling Units (affordable)	N/A	61	99*	+34
Commercial (gsf)	N/A	0	22,285	+22,285
Community Facility (gsf)	N/A	25,060	1,128	-23,932
Parking (spaces)	N/A	122	176	+54
Building Height (ft)	N/A	95	154**	+59

Notes:
* The Applicant is proposing 144 affordable DUs pursuant to the Workforce Option of the MIH program. However, for conservative analysis purposes the EAS assumes that 20 percent of the proposed residential floor area (approximately 84,336 gsf) would be affordable to households earning up to 80 percent of AMI. This translates to approximately 99 affordable DUs for CEQR purposes, based on DCP's guidance on average unit size for affordable housing (850 gsf).
** Building height of 154 feet includes rooftop mechanical bulkheads. The height to the top of the roof would be approximately 145 feet.
Sources:
BRP East Brooklyn Development LLC; GF55 Partners; and AKRF, Inc.

REMAINDER OF PROJECT AREA (LOT 49)

The proposed zoning map amendment would only rezone an approximately 1.83-foot-wide portion of the eastern extent of Lot 49 to R8A/C2-4. Lot 49 is also currently occupied by an existing seven-story, 111-unit senior housing building constructed in 1984 and most recently renovated in 2014. The 2014 building renovation was followed by the execution of a Regulatory Agreement between the owner, CABS Senior Housing LP/CABS Senior Housing Development Fund Company, Inc. and HPD to preserve affordability for a term of 40 years. Based on these factors, Lot 49 does not meet the criteria of a "soft site" as defined by the *CEQR Technical Manual*, and is therefore excluded from the RWCDS and any further analysis in the EAS.

F. ADDITIONAL TECHNICAL ANALYSES

All analyses were performed in accordance with the guidance contained in the *CEQR Technical Manual*. For environmental categories in which the EAS checklist does not indicate the need for further assessment, the Proposed Development would not have the potential to result in any significant adverse impacts, and no further analysis is necessary. For the environmental categories for which a "yes" box was checked, additional information is provided below or in the supplemental attachments to the EAS.

As discussed further below, the incremental differences in height, density, and residential unit count (i.e., development program) between the No Action and With Action conditions, presented in **Table A-1** above, does not warrant additional analyses of socioeconomic conditions, community facilities and services, water and sewer infrastructure, solid waste and sanitation services, energy, or greenhouse gas emissions.

LAND USE, ZONING, AND PUBLIC POLICY

See Attachment B, "Land Use, Zoning, and Public Policy."

SOCIOECONOMIC CONDITIONS

According to the *CEQR Technical Manual*, the six principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant adverse impacts due to (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement due to increased rents; (5) indirect business displacement due to retail market saturation; and (6) adverse effects on specific industries. A socioeconomic assessment should be conducted if an action may reasonably be expected to create substantial socioeconomic changes in an area. This can occur if an action would directly displace a residential population, affect substantial numbers of businesses or employees, or eliminate a business or institution that is unusually important to the community. It can also occur if an action would bring substantial new development that is markedly different from existing uses and activities in the neighborhood, and therefore would have the potential to lead to indirect displacement of businesses or residents from the area.

As detailed below, based on *CEQR Technical Manual* guidelines the Proposed Actions do not have the potential to result in significant adverse impacts with respect to any of the six socioeconomic issues of concern.

DIRECT RESIDENTIAL AND BUSINESS DISPLACEMENT

Since the Development Site is currently vacant, the Proposed Actions would not result in any direct displacement of residents or businesses.

INDIRECT RESIDENTIAL DISPLACEMENT

The CEQR concern with respect to indirect residential displacement is whether a project may introduce a trend or accelerate a trend of changing socioeconomic conditions that may potentially displace a vulnerable population to the extent that the socioeconomic character of the neighborhood would change. According to the *CEQR Technical Manual*, indirect effects can occur if a project would introduce a substantial new use that is markedly different from existing uses, development, and activities within the neighborhood. The *CEQR Technical Manual* also suggests that residential development of 200 units or less would typically not result in significant socioeconomic impacts. The Proposed Actions and associated RWCDS would result in an incremental increase of approximately 182 DUs. Therefore, further analysis is not necessary as the Proposed Actions would not be expected to affect real estate market conditions.

INDIRECT BUSINESS DISPLACEMENT DUE TO INCREASED RENTS

The concern with respect to indirect business displacement due to increased rents is whether a project could lead to increases in property values, and thus rents, making it difficult for some businesses or institutions to remain in the area. According to the *CEQR Technical Manual*, indirect effects can occur if a project would introduce a substantial new use that is markedly different from existing uses, development, and activities within the neighborhood. Commercial development of 200,000 sf or less would typically not result in socioeconomic impacts. The Proposed Actions and associated RWCDS would result in an increment of 22,272 gsf of commercial development. As such, a preliminary assessment of indirect business displacement due to increased rents is not warranted.

INDIRECT BUSINESS DISPLACEMENT DUE TO MARKET SATURATION

The concern with respect to indirect business displacement due to retail market saturation is whether a project would add to, or create, a retail concentration that may draw a substantial amount of sales from existing businesses within the study area to the extent that certain categories of business

close and vacancies in the area increase, thus resulting in potential for disinvestment on local retail streets. Projects resulting in less than 200,000 gsf of retail on a single development site would not typically result in socioeconomic impacts. The With Action condition includes a total of 25,060 gsf of retail space. Based on *CEQR Technical Manual* guidelines, an assessment of potential indirect business displacement due to retail market saturation (i.e., competition) is not warranted.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

According to the *CEQR Technical Manual*, a significant adverse impact due to adverse effects on specific industries may occur if an action would quantifiably diminish the viability of a specific industry that has substantial economic value to the City's economy. The Project Area is currently vacant land. Therefore, the Proposed Actions would not significantly affect business conditions in any industry or any category of business within or outside the study area.

As described in the indirect business displacement discussion above, the Proposed Actions do not have the potential to result in significant indirect business displacement. Therefore, the Proposed Development would not indirectly substantially reduce employment or have an impact on the economic viability in any specific industry or category of business. As such, the Proposed Actions would not result in significant adverse impacts due to adverse effects on specific industries.

COMMUNITY FACILITIES AND SERVICES

As recommended by the *CEQR Technical Manual*, a community facilities assessment is warranted if a project has the potential to result in either direct or indirect effects on community facilities. If a project would physically alter a community facility, whether by displacement of the facility or other physical change, this "direct" effect triggers the need to assess the service delivery of the facility and the potential effect that the physical change may have on that service delivery. New population added to an area as a result of a project would use existing services, which may result in potential "indirect" effects on service delivery. Depending on the size, income characteristics, and age distribution of the new population, there may be potential effects on public schools, libraries, or child care centers.

DIRECT EFFECTS

The Proposed Development would not displace or otherwise directly affect any public schools, child care centers, libraries, health care facilities, or police and fire protection services. Therefore, an analysis of potential direct effects is not warranted.

INDIRECT EFFECTS

The *CEQR Technical Manual* provides thresholds for guidance in making an initial determination of whether a detailed analysis is necessary to determine potential for impacts due to indirect effects on community facilities. **Table A-2** lists those *CEQR Technical Manual* analysis thresholds for each community facility type. If a project exceeds the threshold for a specific facility type, a more detailed analysis is warranted. A preliminary screening analysis was conducted to determine if the Proposed Actions would exceed any of the *CEQR Technical Manual* thresholds.

Table A-2
Community Facilities – Preliminary Screening Analysis Criteria

Community Facility	Threshold For Detailed Analysis
Public schools	More than 50 elementary/intermediate school or 150 high school students
Libraries	Greater than 5 percent increase in ratio of DUs to libraries in borough
Health care facilities (outpatient)	Introduction of sizeable new neighborhood where none existed before[1]
Child care centers (publicly funded)	More than 20 eligible children based on number of low- and low/moderate-income DUs by borough
Fire protection	Introduction of sizeable new neighborhood where none existed before[1]
Police protection	Introduction of sizeable new neighborhood where none existed before[1]

Notes:
DU = dwelling unit
[1] The *CEQR Technical Manual* cites the Hunter's Point South project in Long Island City, Queens, as an example of a project that would introduce a sizeable new neighborhood where none existed before. That project was expected to introduce approximately 6,650 new DUs to the Hunter's Point South waterfront.
Source: 2014 *CEQR Technical Manual*

As described below, based on the RWCDS for the Proposed Actions and the screening criteria in **Table A-2**, detailed analyses of indirect effects on public schools, libraries, child care centers, health care facilities, and police and fire services are not warranted.

Public Schools

The *CEQR Technical Manual* recommends conducting a detailed analysis of public schools if a proposed action would generate more than 50 elementary/intermediate school students and/or more than 150 high school students. The Proposed Actions would introduce an increment of 182 new DUs. In 2019, the SCA released new student generation rates that are given at the Community School District (CSD). The 2019 student generation rates were calculated using the latest 5-year estimates from the American Community Survey (ACS) and supersede those presented in the *CEQR Technical Manual*. The multipliers For CSD 13 in Brooklyn, within which the Development Site is located, are as follows: 0.05 elementary, 0.01 intermediate, and 0.05 high school students per DU. Using the new multipliers, the RWCDS for the Proposed Actions would generate approximately 9 elementary school students, two intermediate school students, and 9 high school students. The Proposed Development would not exceed the 50 student threshold for elementary/intermediate schools or the 150 student threshold for high schools. Therefore, a detailed analysis of the Proposed Actions' potential effect on public schools is not warranted.

Libraries

Potential impacts on libraries can result from an increased user population. According to the *CEQR Technical Manual*, a proposed action that results in a 5 percent increase in the average number of DUs served per branch—which is 734 DUs per branch in Brooklyn—may cause the potential for a significant impact on library services and require further analysis. The Proposed Development would introduce 182 incremental DUs. Therefore, the Proposed Development does not exceed this threshold, and a detailed analysis of the Proposed Actions' potential effect on libraries is not warranted.

Child Care Centers

According to the *CEQR Technical Manual*, if a Proposed Project would add more than 20 children eligible for publicly funded child care to the study area's child care facilities, a detailed analysis of its potential for impact on publicly funded child care facilities is warranted. This threshold is based on the number of low-income and low/moderate-income DUs introduced by a proposed

project. Low-income and low/moderate-income affordability levels are intended to approximate the financial eligibility criteria for publicly funded child care facilities established by the Administration for Children's Services, which generally corresponds to 200 percent of the Federal Poverty Level or 80 percent of AMI. In Brooklyn, projects introducing 110 or more low- to moderate-income DUs would meet the threshold for analysis of introducing 20 or more children eligible for publicly funded child care services.

As discussed above, the Proposed Development would include affordable DUs in accordance with MIH. However, since a determination on the MIH Option for the Proposed Development will not be finalized until the Proposed Actions certify into ULURP and proceed through the public review process, the EAS assumes that 20 percent of the proposed residential floor area (approximately 84,336 gsf) would be affordable to households earning up to 80 percent of AMI. This translates to approximately 99 affordable units based on DCP's guidance on average unit size for affordable housing (850 gsf). Since the 110 DU threshold for analysis of publicly funded child care in Brooklyn would not be exceeded, a detailed assessment of child care centers is not warranted.

Health Care Facilities

Health care facilities include public, proprietary, and nonprofit facilities that accept government funds (usually in the form of Medicare and Medicaid reimbursements) and that are available to any member of the community. Examples of these types of facilities include hospitals, nursing homes, clinics, and other facilities providing outpatient health services.

According to the *CEQR Technical Manual,* if a Proposed Project would create a sizeable new neighborhood where none existed before, there may be increased demand on local public health care facilities, which may warrant further analysis of the potential for indirect impacts on outpatient health care facilities. The *CEQR Technical Manual* cites the Hunter's Point South project as an example of a project that would introduce a sizeable new neighborhood where none existed before. The Hunter's Point South project would introduce approximately 6,650 new DUs to the Hunter's Point South waterfront in Long Island City, Queens. The Proposed Development is located within the Bedford-Stuyvesant neighborhood of Brooklyn, which is an established neighborhood with a long-term trend toward increased residential development. The Proposed Actions involve a site-specific rezoning and the Proposed Development would not result in the creation of a sizeable new neighborhood where none existed before. Therefore, a detailed analysis of indirect effects on health care facilities is not warranted.

Police and Fire Services

The *CEQR Technical Manual* recommends detailed analyses of impacts on police and fire service in cases where a proposed action has the potential to affect the physical operations of, or direct access to and from a precinct house or fire station, or where a proposed action would create a sizeable new neighborhood where none existed before. The Proposed Actions would not result in these direct effects on either police or fire services as it does not affect the physical operations of a precinct house or fire station, nor would it create a sizeable new neighborhood where none existed before. Therefore, no further analysis of the potential for impacts on police and fire service is warranted.

OPEN SPACE

See Attachment C, "Open Space."

SHADOWS

See Attachment D, "Shadows."

HISTORIC AND CULTURAL RESOURCES

See Attachment E, "Historic and Cultural Resources."

URBAN DESIGN AND VISUAL RESOURCES

See Attachment F, "Urban Design and Visual Resources."

NATURAL RESOURCES

A natural resources assessment is conducted when a natural resource is present on or near a project site and when an action involves the disturbance of that resource. The *CEQR Technical Manual* defines natural resources as water resources, including surface waterbodies and groundwater; wetland resources, including freshwater and tidal wetlands; upland resources, including beaches, dunes, and bluffs, thickets, grasslands, meadows and old fields, woodlands and forests, and gardens and other ornamental landscaping; and built resources, including piers and other waterfront structures. The Development Site is currently a vacant lot which was most recently developed with a nursing home. There are no significant natural resources on the Development Site, and the Proposed Development would not result in any significant adverse impacts on natural resources.

HAZARDOUS MATERIALS

See Attachment G, "Hazardous Materials."

WATER AND SEWER INFRASTRUCTURE

The Proposed Actions would not result in an increase in the demand for water of more than 1 million gallons per day (gpd). In addition, the Proposed Actions would not result in development exceeding the thresholds of analysis for sewer infrastructure. The Project Area is located in an area served by a combined sewer system, and the incremental development expected with the Proposed Actions would not exceed the applicable threshold for Brooklyn (400 DUs and/or 150,000 sf of commercial space). The Proposed Actions would therefore not result in any significant adverse impacts on water and sewer infrastructure.

SOLID WASTE AND SANITATION SERVICES

The *CEQR Technical Manual* specifies that few projects generate substantial amounts of solid waste (50 tons a week or more) that would result in a significant adverse impact. The Proposed Actions would result in development that generates less than 50 tons a week. Therefore, no further analysis is required. The Proposed Actions would not result in any significant adverse impacts to solid waste and sanitation services.

ENERGY

According to the *CEQR Technical Manual,* a detailed assessment of energy impacts would be limited to actions that could significantly affect the transmission or generation of energy or that generate significant consumption of energy. The Proposed Development would be served by available energy suppliers, and the Proposed Actions are not expected to generate significant demand for energy. Therefore, no further analysis is required and the Proposed Development would not result in significant adverse impacts to the consumption or supply of energy.

TRANSPORTATION

See Attachment H, "Transportation."

AIR QUALITY

See Attachment I, "Air Quality."

GREENHOUSE GAS EMISSIONS

Increased greenhouse gas (GHG) emissions are changing the global climate, which is predicted to lead to wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes to precipitation levels. According to the *CEQR Technical Manual,* a GHG emissions assessment is typically included only for larger projects undergoing an Environmental Impact Statement (EIS), as well as certain cases when the project would undergo an EIS and would result in development of 350,000 sf or greater, is a City capital project, or includes large-scale power generation or has the potential to fundamentally change the City's solid waste management system. A GHG assessment has not been performed for the Proposed Actions because it does not meet the criteria which would warrant assessment.

NOISE

See Attachment J, "Noise."

PUBLIC HEALTH

As described the EAS Attachments G, I, and J, analyses for hazardous materials, noise and air quality were completed. The air quality analyses, which accounted for both mobile and stationary sources, concluded that there would be no significant adverse impacts resulting from the Proposed Development. Through the mapping of an (E) Designation related to hazardous materials and noise, measures to preclude impacts would be included as part of construction and/or operation of the Proposed Development. No unmitigated significant adverse impacts would occur with respect to hazardous materials, noise, and air quality. Therefore, a public health assessment is not warranted.

NEIGHBORHOOD CHARACTER

As defined in the *CEQR Technical Manual*, neighborhood character is considered to be an amalgam of the various elements that define a neighborhood's distinct personality. These elements may include a neighborhood's land use, urban design, visual resources, historic resources, socioeconomics, traffic, and/or noise. An assessment of neighborhood character is generally needed when a proposed project has the potential to result in significant adverse impacts in any of the technical areas listed above, or when a proposed project may have moderate effects on several of the elements that define a neighborhood's character. As discussed above and in the attachments to this EAS, the Proposed Development would not have significant adverse impacts to or result in any moderate effects in these technical areas related to neighborhood character.

CONSTRUCTION

As discussed below, the Proposed Development would not result in significant adverse construction impacts. The construction activities associated with the Proposed Development would be expected to result in conditions typical of construction sites in New York City. According to the Applicant, the overall construction duration for the Proposed Development is anticipated to be less than 24 months and is considered to be short-term (i.e., less than 2 years) in accordance with the *CEQR Technical Manual*. Specifically, construction of the Proposed Development would consist of the following primary construction stages, which may overlap at certain times: excavation and foundation (Month 1 to Month 2; approximately 2 months); superstructure construction (Month 3 to Month 5; approximately 3 months); exteriors (Month 6 to

Month 13; approximately 8 months and concurrent with interiors work); interiors (Month 6 to Month 17; approximately 12 months); and finishes (Month 18 to Month 23; approximately 6 months).

During this time, construction activities for the Proposed Development would normally take place between 7:00 AM and 6:00 PM on weekdays, although the delivery or installation of certain critical equipment could occur on weekend days. The permitted hours of construction are regulated by the New York City Department of Buildings (DOB) and apply to all areas of the City. The Proposed Development is not located in a Central Business District (CBD) but as is typical for construction projects in New York City, temporary curb-lane and/or sidewalk closures or narrowing may be required. Maintenance and Protection of Traffic (MPT) plans would be developed for such instances and the approval of these plans and implementation of the closures would be coordinated with the New York City Department of Transportation's (DOT) Office of Construction Mitigation and Coordination (OCMC). During construction of the Proposed Development, all necessary measures would be implemented to ensure adherence to the New York City Air Pollution Control Code to minimize construction-related air and dust emissions. In addition, construction noise is regulated by the requirements of the New York City Noise Control Code (also known as Chapter 24 of the Administrative Code of the City of New York, or Local Law 113) and the New York City Department of Environmental Protection (DEP)'s Notice of Adoption of Rules for Citywide Construction Noise Mitigation (also known as Chapter 28). These requirements mandate that specific construction equipment and motor vehicles meet specified noise emission standards; that construction activities be limited to weekdays between the hours of 7:00 AM and 6:00 PM; and that construction materials be handled and transported in such a manner as not to create unnecessary noise.

Overall, the duration and severity of potential construction effects would be short-term and adverse effects associated with the proposed construction activities would be minimized through implementation of the measures described above. Accordingly, the Proposed Development would not result in significant adverse impacts during construction, and no further analysis is required. ✶

Attachment B: Land Use, Zoning, and Public Policy

A. INTRODUCTION

This attachment assesses the potential impacts of the Proposed Actions on land use, zoning, and public policy, as compared with conditions in the future without the Proposed Actions (the No Action condition). As described in Attachment A, "Project Description and Screening Analyses," the Proposed Actions would rezone the eastern portion of Block 1778 (Lot 55 and part of Lot 49 – the "Project Area" or "Rezoning Area") in the Bedford Stuyvesant neighborhood of Brooklyn, Community District 3. The Proposed Actions would facilitate the development of an approximately 445,085 gross square foot (gsf) mixed-use building containing residential, commercial, and community facility uses along with at-grade and underground parking (the "Proposed Development") at 270 Nostrand Avenue (Block 1778, Lot 55 – the "Development Site"). As described below, the assessment concludes that the Proposed Actions would be compatible with existing land uses in the surrounding area, and would not result in any significant adverse impacts to land use, zoning, or public policy.

B. METHODOLOGY

The Project Area is located in the Bedford Stuyvesant neighborhood of Brooklyn, Community District 3. This analysis of land use, zoning, and public policy assesses the area within 400 feet of the Project Area, which is where the Proposed Actions could reasonably be expected to cause potential effects, according to the 2014 *City Environmental Quality Review (CEQR) Technical Manual*. The land use study area is generally bounded by Pulaski Street to the north, the midpoint between Marcy Avenue and Nostrand Avenue to the east, Lafayette Avenue to the south, and Spencer Court to the west (see **Figure B-1**).

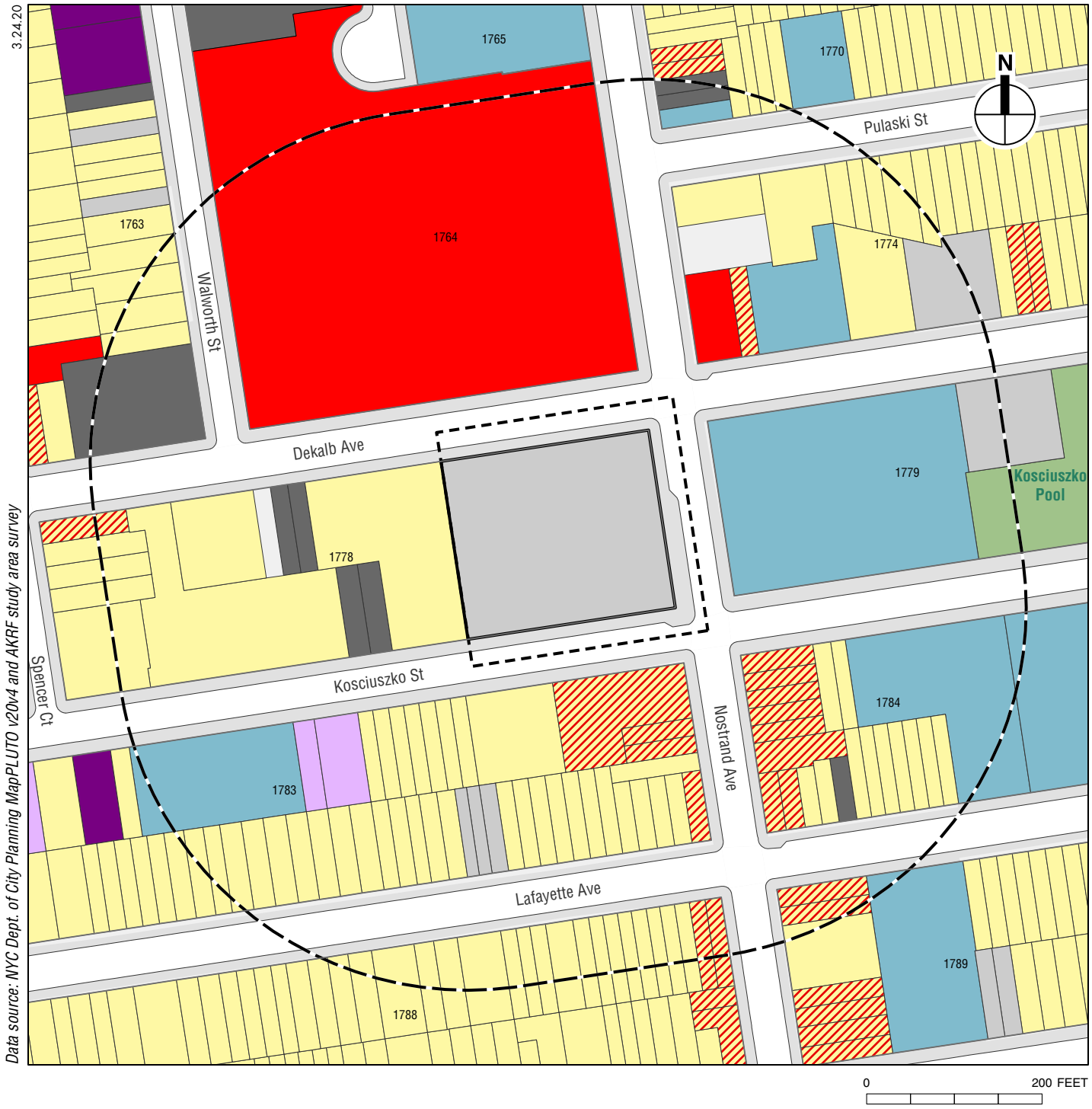
The analysis begins by considering existing conditions in the study area in terms of land use, zoning, and public policy. The analysis then considers land use, zoning, and public policy in the No Action condition in the 2023 analysis year by identifying developments and potential policy changes expected to occur within that timeframe. Probable impacts of the Proposed Actions are then identified by comparing conditions expected in the future with the Proposed Actions (the With Action condition) to those in the No Action condition.

C. EXISTING CONDITIONS

LAND USE

DEVELOPMENT SITE

The Project Area covers the eastern portion of Brooklyn Block 1778 and includes the entirety of Lot 55 and an approximately 1.83-foot wide portion of (p/o) the eastern extent of adjacent Lot 49. The Development Site on which the Proposed Development is to be constructed consists of Lot



Existing Land Use

270 NOSTRAND AVENUE

Figure B-1

55, and measures approximately 47,634 square feet (sf) in size. The Development Site is currently vacant, and was most recently developed with a four-story institutional building constructed in 1975, which was used as a nursing home until 2015, and subsequently demolished in 2018. The current owner of the Development Site is NNRC Properties LLC and the Applicant, BRP East Brooklyn Development LLC, is the contract vendee.

REMAINDER OF THE PROJECT AREA (PART OF LOT 49)

The Project Area also contains a small portion of Lot 49 (590 Dekalb Avenue), an approximately 24,220 sf lot located to the west of the Development Site. Lot 49 is currently occupied by an existing seven-story, 111-unit senior housing building constructed in 1984 and most recently renovated in 2014. The 2014 building renovation was followed by the execution of a Regulatory Agreement between the owner, CABS Senior Housing LP/CABS Senior Housing Development Fund Company, Inc. and the New York City Department of Housing Preservation and Development (HPD) to preserve affordability for a term of 40 years.

STUDY AREA

Uses within the land use study area are predominately residential, but also include commercial, community facility, transportation, parking, and open space uses, along with scattered vacant land. The remainder of Block 1778 to the west of the Project Area is almost entirely residential, containing 4- to 12-story residential buildings. The remainder of Block 1778 also includes lots used for parking, and two ground floor commercial uses near the southeast corner of Spencer Court and Dekalb Avenue.

The block located immediately to the north of the Project Area, between Nostrand Avenue and Walworth Street (Block 1764), is occupied by commercial uses including a Home Depot store with associated parking, and the Brooklyn Job Corps. Academy (585 Dekalb Avenue). The portion of the block to the northwest of the Project Area (Block 1763) that falls within the study area contains parking and residential uses on the west side of Walworth Street (three- and four-story residential walkup buildings). Portions of Blocks 1770 and 1774 are found within the northeastern extent of the study area. Only the most southwesterly portion of Block 1770 is within the study area, and this portion contains a house of worship (the Pentecostal House of Prayer) and parking uses, located at the southwest corner of Pulaski Street and Nostrand Avenue. The western half of Block 1774 is located within the study area, and this portion contains a mix of residential, commercial, community facility, and vacant uses. Residential uses range from three- to seven-story residential buildings, some containing ground floor retail uses. A commercial use (Sugarhill Restaurant & Supper Club) is located on the southwest corner of the block, at the northeast corner of Dekalb and Nostrand Avenues. The Marcy Branch of the Brooklyn Public Library is located immediately east of this commercial use.

The block directly to the east of the Development Site (Block 1779) is dominated by two community facility uses. The eastern portion of the block contains the Kosciuszko Pool, a public pool operated by the New York City Department of Parks and Recreation (NYC Parks), while a health facility (the Bedford Medical Office) is located on the western portion of the block. A City-owned vacant lot currently used for parking also exists on the block located between these two uses. Portions of Blocks 1784 and 1789 to the southeast of the Project Area are located within the study area, specifically the northwesterly portion of Block 1789 and the western half of Block 1784. The portion of Block 1789 located within the study area contains residential uses (three- and five-story buildings) with the three-story buildings containing commercial uses on the ground

floors, as well as a small portion of a lot containing the Urban Dove Team Charter School, a community facility use. The western portion of Block 1784 contains residential, commercial, community facility, and parking uses. Residential uses include two- to seven-story residential buildings, with those fronting Nostrand Avenue containing commercial uses on their ground floors. To the east of these residential uses is the Salvation Army's Brooklyn Bedford Corps Community Center, to the east of which is a building containing the Benjamin Banneker School and Community Partnership Middle School.

Portions of Block 1783 and 1788 to the south of the Project Area are included within the study area. The portion of Block 1788 located within the study area consists entirely of residential uses made up of three- to five-story residential buildings, and those closest to the intersection of Lafayette Avenue and Nostrand Avenue have commercial uses on the ground floors. The portion of Block 1783 located within the study area contains residential, commercial, community facility, transportation, and vacant uses. The majority of the block consists of residential uses made up of three- to six-story buildings with many of those fronting Nostrand Avenue containing commercial uses on the ground floors. A daycare center and automotive repair facility are also located at the midpoint of the block fronting Kosciusko Street.

The Project Area is well served by public transit as it is located within a Transit Zone and immediately adjacent to a stop for the B44 Select Bus Service express bus, and one block away from the Bedford-Nostrand Avenue station for the G train. Other bus lines in and beyond the surrounding area include the B38, which runs from Ridgewood to Downtown Brooklyn, along Dekalb and Lafayette Avenues, the B48, which runs from Lefferts Gardens to Greenpoint, along Classon and Franklin Avenues, and the B54, which runs from Downtown Brooklyn to Ridgewood via Myrtle Avenue.

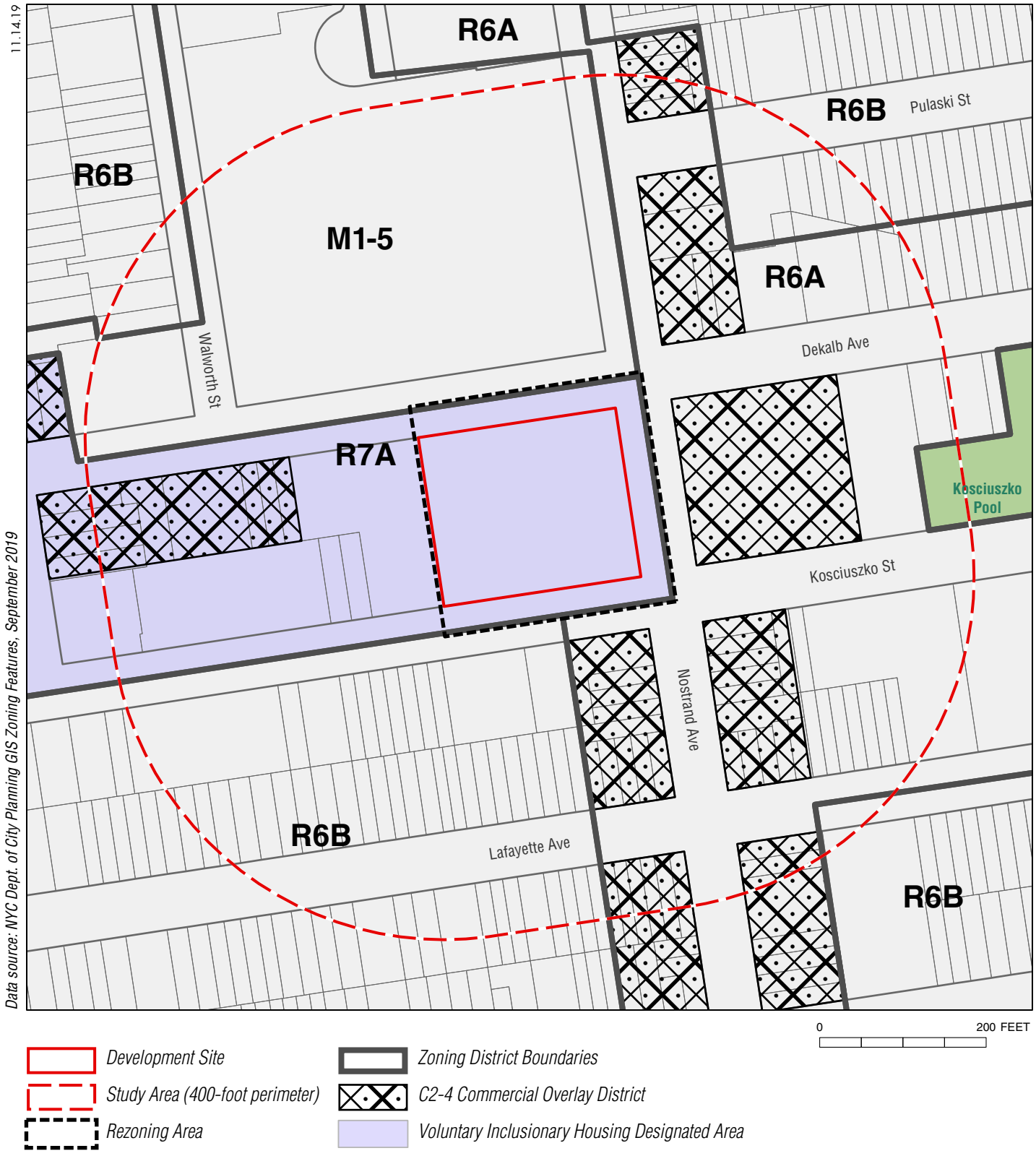
ZONING

DEVELOPMENT SITE

The Development Site is currently zoned R7A (see **Figure B-2**) and is also within a Voluntary Inclusionary Housing (IH) designated area.

In 2012, the City Council adopted a comprehensive rezoning of Bedford-Stuyvesant North, which had been proposed by the Department of City Planning at the request of Community Board 3 and local elected officials (the "Bed-Stuy North Rezoning"). The goals of the rezoning were to preserve the existing character and building patterns in the residential core of the neighborhood, to direct new residential and mixed-use growth to commercial/transit corridors, to incentivize affordable housing creation in major corridors, and to promote vibrant, active, pedestrian-friendly streets with regulations to reinforce their commercial character. Corridors and major thoroughfares were rezoned R7D, R7A and R6A. The Development Site, being located on Nostrand Avenue (a major thoroughfare), was rezoned from R6 to R7A in the Bed-Stuy North Rezoning.

R7 districts are medium-density residential districts mapped throughout the City. While standard R7 districts can choose between Height Factor and Quality Housing bulk regulations, in an R7A district Quality Housing regulations are mandatory. These contextual regulations facilitate new buildings with high lot coverage and continuous streetwalls, blending with existing buildings in established neighborhoods. In R7A zoning districts, the maximum floor area ratio (FAR) for both residential and community facility uses is 4.0, and buildings may occupy up to 65 percent of an interior lot or 100 percent of a corner lot. The minimum base height before a building setback is 40 feet and the maximum base height before setback is 65 feet. Buildings may rise to a maximum



Existing Zoning

270 NOSTRAND AVENUE

Figure B-2

height of eight stories (85 feet with a qualifying ground floor), and parking is required for 50 percent of DUs and 15 percent of income restricted housing units.

Under the Development Site's existing R7A zoning, which is paired with a Voluntary IH designated area, the maximum FAR for residential and community facility uses is 4.6, and buildings may occupy up to 65 percent of an interior lot or 100 percent of a corner lot. The minimum base height before a building sets back is 40 feet and the maximum base height before setback is 75 feet. Buildings may rise to a maximum height of nine stories (95 feet with a qualifying ground floor), and parking is required for 50 percent of DUs and 15 percent of income restricted housing units.

REMAINDER OF THE PROJECT AREA (PART OF LOT 49)

Similar to the Development Site, the portion of Lot 49 located within the Project Area is also zoned as R7A and is included within a Voluntary IH designated area.

STUDY AREA

The entirety of the Project Area's block is zoned R7A and is included within a Voluntary IH designated area, with the northwestern extent also including a C2-4 commercial overlay. In addition to the R7A district that the Project Area is located within, the study area also contains R6A, R6B, M1-5 districts, with a C2-4 commercial overlay primarily found along the Nostrand Avenue corridor. As a result of the Bed-Stuy North Rezoning, much of the neighborhood was rezoned from R6 (a district without a firm height limit) to contextual districts.

An R6A zoning district is mapped to the east of the Project Area. Similar to R7A districts, R6A districts are R6 medium-density residential districts in which contextual Quality Housing bulk regulations are mandatory, facilitating buildings with high lot coverage and continuous streetwalls. Under R6A zoning, the maximum FAR for both residential and community facility uses is 3.0 and buildings may occupy up to 65 percent of an interior lot or 100 percent of a corner lot. Parking is required for 50 percent of DUs and 25 percent of income restricted housing units.

R6B zoning districts are located to the northeast, southeast, southwest, and northwest of the Project Area. R6B districts are medium-density districts often zoned in traditional row house areas. Like R6A and R7A districts, in R6B districts Quality Housing bulk regulations are mandatory so as to preserve the scale and streetscape of these the areas in which they are zoned. Under R6B zoning, the maximum FAR for both residential and community facility uses is 2.0 and buildings may occupy up to 60 percent of an interior lot or 100 percent of a corner lot. The minimum base height before building setback is 30 feet and the maximum base height before setback is 40 feet (or 45 feet with a qualifying ground floor). Buildings may rise to a maximum of 50 feet (or 55 feet with a qualifying ground floor) and parking is required for 50 percent of DUs and 25 percent of income restricted housing units.

An M1-5 district is mapped directly to the north of the Project Area. M1-5 districts are manufacturing zoning districts that typically include light industrial uses that meet M1 performance standards; heavy industrial activities are not permitted in M1 districts, nor are residential uses except by special permit. Certain commercial and community facility uses are also permitted in M1 districts, primarily Use Group 4 ambulatory care facilities and houses of worship. The FAR for manufacturing and uses in an M1-5 district is 5.0 and the FAR for permitted community facility uses is 6.5. Building bulk in M1-5 districts is controlled by a sky exposure plane. No parking is required for most permitted uses in the M1-5 district.

C2-4 commercial overlays are located throughout the study area, primarily within the R7A district along Dekalb Avenue and within the R6A district along Nostrand Avenue. Commercial overlays are mapped within residential districts, typically along streets that serve local retail needs, allowing commercial uses. Typically these overlays extend to a depth of 100 to 200 feet from such corridors. In mixed-buildings, those with both residential and commercial uses, commercial uses are limited to one to two floors and must always be located below the residential use. When mapped in R6A and R7A districts, the maximum commercial FAR is 2.0.

Table B-1
Zoning Districts Located in the Study Area

Zoning District	Maximum FAR[1]	Uses/Zone Type
R6A	3.0	Medium-density Contextual Residential District
R6B	2.0	Medium-density Contextual Residential District
R7A	4.0 (4.6 w/ Voluntary IH)	Medium-density Contextual Residential District
M1-5	5.0 for manufacturing and certain permitted commercial uses; 6.5 for certain permitted community facility uses	Light Industrial District
C2-4	2.0	Commercial Overlay

Notes:
[1] FAR is a measure of density establishing the amount of development allowed in proportion to the lot area. For example, a lot of 10,000 sf with a FAR of 1 has an allowable building area of 10,000 sf. The same lot with an FAR of 10 has an allowable building area of 100,000 sf.
Source: *New York City Zoning Resolution*

PUBLIC POLICY

PLANYC/ONENYC

In April 2007, the Mayor's Office of Long Term Planning and Sustainability released PlaNYC: A Greener, Greater New York (PlaNYC). Since that time, updates to PlaNYC have been issued that build upon the goals set forth in 2007 and provide new objectives and strategies. In 2015, One New York: The Plan for a Strong and Just City (OneNYC) was released by the Mayor's Office of Sustainability and the Mayor's Office of Recovery and Resiliency. OneNYC builds upon the sustainability goals established by PlaNYC and focuses on growth, equity, sustainability, and resiliency. Goals outlined in the report include those related to housing (ensuring access to affordable, high-quality housing) and thriving neighborhoods (ensuring that neighborhoods will be well-served).

HOUSING NEW YORK: A FIVE-BOROUGH, TEN-YEAR PLAN

On May 5, 2014, the de Blasio administration released *Housing New York: A Five-Borough, Ten-Year Plan (Housing New York)*, a plan intended to build and preserve 200,000 affordable DUs over the coming decade to support New Yorkers with a range of incomes. The plan details the key policies and programs for implementation, including developing affordable housing on underused public and private sites. *Housing New York* calls for community engagement at the early stages of the planning process, so that community input informs land use and zoning changes intended to generate new affordable housing. Lastly, *Housing New York* calls for providing high-quality affordable housing to the most vulnerable residents of New York City. Investing in quality affordable housing for the City's special needs, homeless, and senior households, as well as for

people with disabilities will reduce the demand for social expenditures in the long term and provide a more cost-efficient strategy for addressing a critical housing need. In the 2018 calendar year, under *Housing New York*, the City financed the creation and preservation of more than 34,000 affordable DUs across the five boroughs. In the fourth full year of *Housing New York*, the City financed approximately 10,000 new construction DUs and approximately 24,000 DUs through preservation. The 2017 calendar year affordable housing production and preservation figure is the highest in New York City history. In October of 2017, the City announced a new goal of preserving and/or creating 300,000 affordable DUs by 2026, known as *Housing New York 2.0*, building upon the original program.

INCLUSIONARY HOUSING PROGRAM (IHP)

As discussed above, the Project Area is located within a Voluntary IH designated area under its existing R7A zoning. The IHP promotes economic integration in areas of the City undergoing substantial new residential development by offering an optional floor area bonus in exchange for the creation or preservation of affordable housing, on-site or off-site, principally for low-income households. IHP regulations are contained in Zoning Resolution Section 23-90. Maps of designated areas are in Appendix F of the Zoning Resolution. The IHP requires a percentage of the dwelling units within a building to be set aside, or new or rehabilitated affordable units be provided off-site within the same community district or within one-half mile of the bonused development. All affordable residential units created through the IHP must remain permanently affordable. Affordable apartments may be rental units or, under modifications made to the program in 2009, available in an ownership plan. All bonus floor area must be accommodated within the height and setback provisions of the underlying zoning district.

FOOD RETAIL EXPANSION TO SUPPORT HEALTH (FRESH) PROGRAM

The FRESH program promotes the establishment and expansion of grocery stores in underserved communities through financial and zoning incentives for developers. These incentives include tax reductions, sales tax exemptions, additional development rights, and reductions in required parking. The Project Area is located in an area designated under the FRESH program as eligible for both zoning and discretionary tax incentives.

D. THE FUTURE WITHOUT THE PROPOSED ACTIONS

LAND USE

DEVELOPMENT SITE

In the No Action condition, the Applicant is likely to develop an as-of-right residential and community facility building on the Development Site consistent with the site's existing R7A zoning district (the No Action Development). The No Action Development would be nine stories (95 feet) tall with approximately 249,465 gsf of residential floor area (approximately 305 DUs) and approximately 25,060 gsf of community facility space (assumed as a medical office use) on the ground floor and cellar levels. As the Development Site is located in a Voluntary IH designated area, the No Action Development could include 61 affordable DUs (20 percent of DUs) and 244 market rate DUs (80 percent of DUs) in accordance with the IHP, in which case parking would be required for 50 percent of the market rate units (corresponding to 122 spaces).

REMAINDER OF THE PROJECT AREA (PART OF LOT 49)

In the No Action condition, the existing conditions described above for Lot 49 are expected to remain. As discussed, Lot 49 includes a recently renovated senior housing building that is subject to a Regulatory Agreement with HPD for the preservation of affordable housing over a period of 40 years. It is therefore highly unlikely that any changes would occur on Lot 49 absent the Proposed Actions by 2023.

STUDY AREA

Within the 400 foot study area, there are two known development projects that are currently anticipated to be completed by 2023. Two City-owned lots to the east at 633-639 and 648-654 Dekalb Avenue are proposed for disposition to a developer (selected by HPD) to facilitate approximately 82 new units of affordable housing (see **Figure B-3** and **Table B-2)**.

It should be noted that Attachment H, "Transportation," identifies a total of 43 development projects expected to occur in the No Action condition for a ¼-mile study area, including eight additional small sized projects within the 400-foot land use study area. Refer to Table H-12 in Attachment H, "Transportation," for the assumptions applied to each of the planned projects, including background growth considerations.

Table B-2
No Build Projects (400 ft. Study Area)

Fig Ref.[1]	Project Name/Address	Program
Land Use Study Area (400-foot Radius)		
1	633-639 Dekalb Avenue	37 DUs
2	648-654 Dekalb Avenue	45 DUs

Notes:
[1] See **Figure B-3**.
Planned projects are assumed for purposes of this analysis to be complete by the analysis year of 2023.
Sources:
DOB; AKRF, Inc., field survey, September 2019; DeKalb Commons EAS (18HPD078K)

ZONING AND PUBLIC POLICY

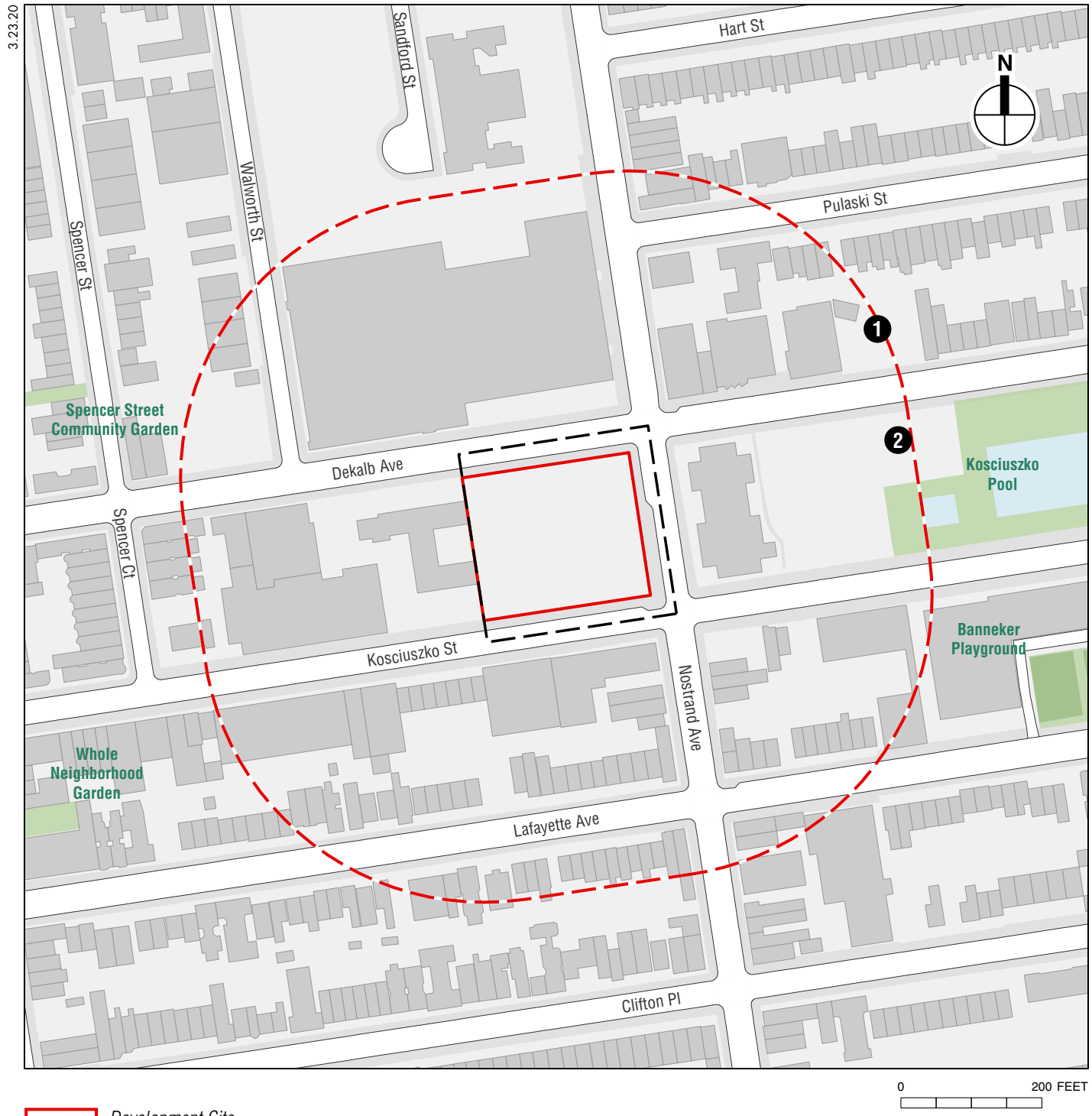
No changes to zoning or public policy applicable to the Project Area are expected by 2023.

E. THE FUTURE WITH THE PROPOSED ACTIONS

LAND USE

DEVELOPMENT SITE

In the With Action condition, the Applicant would construct the Proposed Development on the Development Site. The Proposed Development would be a mixed-use building containing residential, retail, and community facility uses. The building would be approximately 444,289 gsf in size (7.2 FAR) and would contain 487 DUs, approximately 22,285 gsf of local retail space on the cellar and ground floors, and approximately 1,128 gsf of ground floor community facility space (assumed as a medical office use). The Proposed Development would be 14 stories tall and approximately 145 feet in height to the top of the roof, in compliance with the R8A district's height limit pursuant to ZR Section 23-664(b). Accounting for rooftop mechanical bulkheads, the Proposed Development would reach a maximum height of approximately 154 feet. Of the 487



No Action Developments

270 NOSTRAND AVENUE

Figure B-3

residential units proposed on the Development Site, the Applicant envisions that 30 percent (144 units) would be affordable housing units for households earning a weighted average of 115 percent of Area Median Income (AMI), pursuant to the Workforce Housing option of the Mandatory Inclusionary Housing program, and the remaining 70 percent (343 units) would be market rate.

However, since a determination on the MIH Option for the Proposed Development will not be finalized until the Proposed Actions certify into the Uniform Land Use Review Procedure (ULURP) and proceed through the public review process, the EAS will assume that 20 percent of the proposed residential floor area (approximately 84,175 gsf) would be affordable to households earning up to 80 percent AMI. This translates to approximately 99 affordable DUs based on DCP's guidance on average unit size for affordable housing (850 gsf).

Compared to the No Action condition, the Proposed Development being analyzed in this EAS represents an increment of 171,411 gsf of residential space (approximately 182 DUs and 38 affordable DUs); a net increase of approximately 22,285 gsf of commercial space, and a net decrease of approximately 23,932 gsf of community facility space.

The Proposed Development would be 14 stories tall (approximately 145 feet in height to the top of the roof), which is in compliance with the R8A's district height limit pursuant to ZR Section 23-664(b). This would represent a net increase of approximately 50 feet compared to the No Action condition.

The Applicant proposes 176 attended parking spaces on the first floor, mezzanine, and cellar levels of the building, accessible through a 22-foot-wide curb cut located on Kosciuszko Street, approximately 205 feet west of Nostrand Avenue and approximately 11 feet east of Lot 49. The Applicant anticipates that 144 units will be at or below 80 percent of AMI and therefore not subject to parking requirements (although the EAS is assuming a smaller number, as described above). The remaining 343 dwelling units are subject to a 40 percent parking requirement and therefore 137 parking spaces would be required. Since there would be approximately 11 spaces required by the proposed retail floor area, the parking requirement for retail uses would be waived pursuant to ZR Section 36-232. The 176 proposed parking spaces would be 54 more than would be provided in the No Action condition.

REMAINDER OF THE PROJECT AREA

The existing building on Lot 49 is anticipated to remain in the With Action condition. Lot 49 is occupied by an existing seven-story, 111-unit senior housing building constructed in 1984 and most recently renovated in 2014. The 2014 building renovation was followed by the execution of a Regulatory Agreement between the owner, CABS Senior Housing LP/CABS Senior Housing Development Fund Company, Inc. and HPD to preserve affordability for a term of 40 years. Due to these factors, redevelopment is not anticipated and Lot 49 does not meet the criteria of a "soft site" as defined by the *CEQR Technical Manual*.

STUDY AREA

The Proposed Actions would not result in any land use changes in the study area outside of the Development Site. The study area would continue to have a mix of predominately residential, commercial and community facility uses, and the Proposed Development's residential, commercial, and community facility uses would be consistent with these surrounding land uses. The proposed residential uses would be similar to the residential uses in the study area, which vary between taller apartment buildings and lower scale townhouses. Overall, the Proposed

Development would be compatible with and supportive of land uses in the surrounding area and would not result in significant adverse land use impacts.

ZONING

Under the With Action condition, the Project Area, including the entirety of Lot 55 and a p/o Lot 49, would be rezoned; a Zoning Map Amendment to Zoning Map 17a would rezone the Project Area from an R7A district to an R8A district, with a C2-4 commercial overlay over a portion of the rezoned area (see **Figure B-4**). The Applicant also proposes an amendment to the Zoning Resolution to map the Project Area as an MIH area by amending Appendix F of the Zoning Resolution (see **Figure B-5**).

In R8A zoning districts, when mapped within a Mandatory Inclusionary Housing area, residential uses are permitted at a 7.2 FAR, with a requirement that at least 25 percent of the residential floor area be affordable to households averaging 60 percent of AMI or at least 30 percent of the residential floor area be affordable to households averaging 80 percent of AMI. Community facility uses are permitted at a maximum FAR of 6.5. In a C2-4 zoning district, when overlaid on an R8A zoning district, commercial uses are permitted at a 2.0 FAR. Contextual bulk regulations within an R8A zoning district require Quality Housing development that either preserves or establishes a scale compatible with older, higher density buildings, with street walls located at the street line. R8A districts permit new building heights up to 14 stories. Residential buildings in R8A districts must follow not only the Quality Housing bulk regulations but must provide amenities related to interior space, recreation area and landscaping.

Within an MIH area, new developments (which are required to provide affordable housing equivalent to 25 percent to 30 percent of residential floor area) may rise to a maximum height of 145 feet and 14 stories. Accessory off-street parking spaces are required for 40 percent of market rate dwelling units. Within the Transit Zone, no off-street accessory parking spaces are required for affordable dwelling units built pursuant to MIH.

The Applicant is proposing to utilize the Workforce Option of the MIH program, which requires dedication of 30 percent of the residential floor area as permanently affordable for households at an average of 115 percent of Area Median Income, of which at least 5 percent is affordable for households at an average of 70 percent of AMI, and 5 percent is affordable for households at an average of 90 percent of AMI. Thirty percent of the residential floor area in the Proposed Development is approximately equivalent to 144 of the 487 proposed dwelling units. Pursuant to Section 23-154(d)(3) of the Zoning Resolution, the Workforce Option must always be mapped and made available in combination with either Option 1 or Option 2. The Applicant proposes to map the Workforce Option in combination with Option 2 within the MIH area. Option 2 requires that, for new developments, an amount of affordable floor area equivalent to at least 30 percent of the residential floor area within the development be provided, with the weighted average of all income bands not exceeding 80 percent of AMI, no more than three income bands provided, and no income band exceeding 130 percent of the income index.

However, since a determination on the MIH Option for the Proposed Development will not be finalized until the Proposed Actions certify into ULURP and proceed through the public review process, until after the environmental review process, the EAS will assume that 20 percent of the proposed residential floor area (approximately 84,336 gsf) would be affordable to households earning up to 80 percent AMI. This translates to approximately 99 affordable DUs based on DCP's guidance on average unit size for affordable housing (850 gsf).

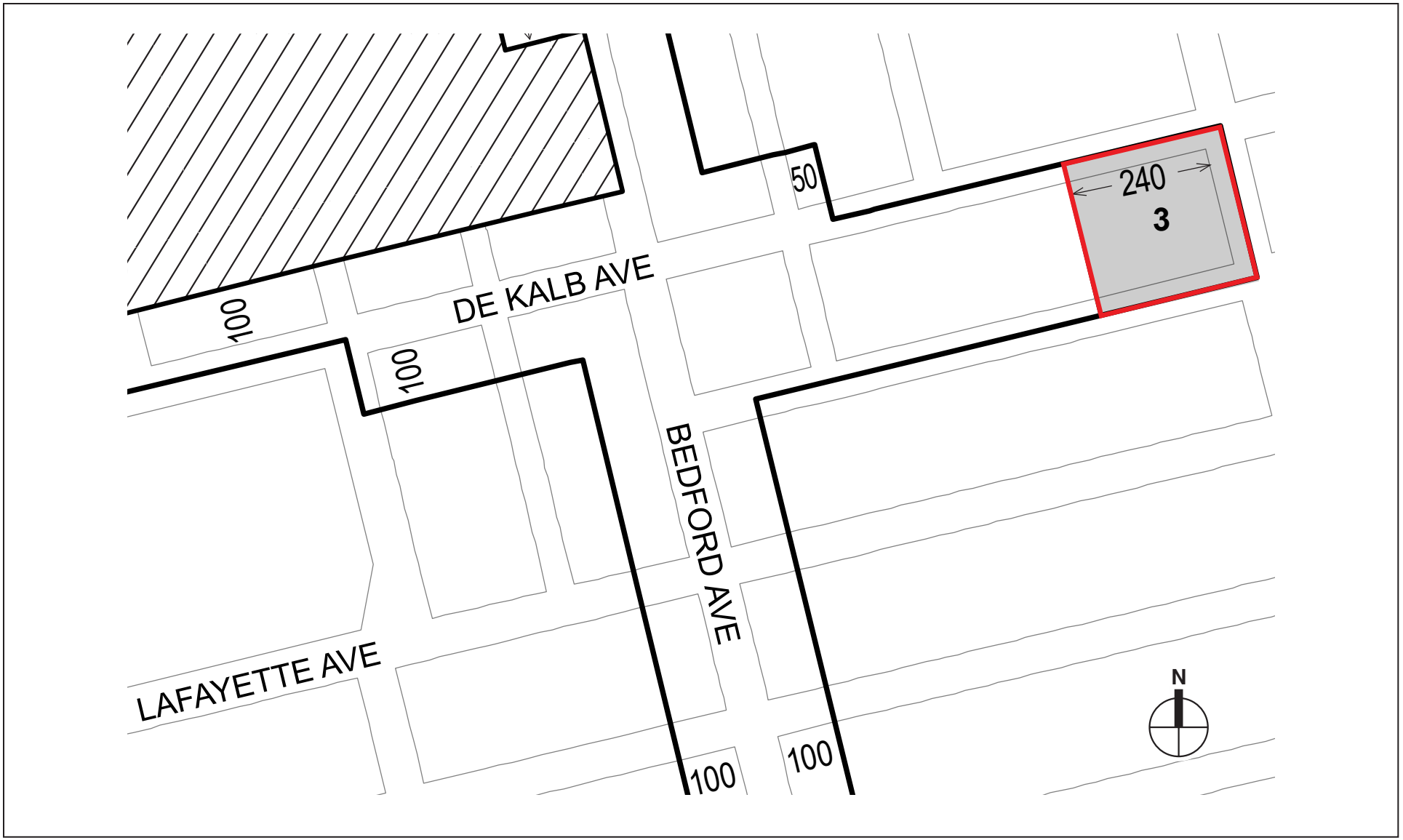


Proposed Zoning

270 NOSTRAND AVENUE

Figure B-4

7.6.20



Development Site

Proposed MIH Text Amendment — ZR Appendix F

270 NOSTRAND AVENUE

Figure B-5

Overall, there are no additional sites other than the Development Site that would be redeveloped as a result of the Proposed Actions within the Project Area and/or the study area. As described above, the Proposed Development, which would be facilitated by the proposed Zoning Text and Zoning Map Amendments, would be similar to the residential buildings and other commercial and community facility uses in and beyond the study area and would not represent a significant increase in built scale as compared to the surrounding buildings. On the same block as the Development Site and within the study area is a newly constructed (in 2011) 12-story, 135-foot-tall apartment building at 31 Kosciuszko Street, which rises to a height greater than the Proposed Development's 125-foot height proposed along the Kosciuszko Street frontage. The building at 31 Kosciuszko Street was constructed in 2011, prior to the Bed-Stuy North Rezoning, which rezoned the entirety of Block 1778 from an R6 district (a district where height is governed by a sky exposure plane) to a contextual R7A zoning district with stricter height controls. A number of NYCHA tower-in-the park style large apartment buildings are located outside of the study area, to the west of the Development Site, including the 20-story Lafayette Gardens at the corner of Lafayette Avenue and Franklin Avenue, and the 24-story Pratt and Ryerson Towers further along Dekalb and Lafayette Avenues. There are also newer six- and seven-story apartment buildings located at 255 Nostrand Avenue, 276 Nostrand Avenue, and 627 Dekalb Avenue. Overall, the Proposed Actions would be consistent with existing zoning in the study area and would not result in any significant adverse zoning impacts.

PUBLIC POLICY

The Proposed Actions would be consistent with Citywide and neighborhood-specific public policies. In particular the Proposed Development would contribute to the goals of *Housing New York / Housing New York 2.0*. As analyzed in this EAS, the Proposed Actions would facilitate the development of at least 99 DUs of much needed permanently affordable housing on the Development Site, which is approximately 38 units higher than what could be developed under the No Action condition. Through the proposed MIH Zoning Text Amendment, the Proposed Actions would be consistent with the City's IHP.

As noted above, the Project Area is located in an area designated under the FRESH program as eligible for both zoning and discretionary tax incentives. Although the Applicant is not seeking a certification under the FRESH program and has not yet confirmed a tenant for the Proposed Development's commercial space, a supermarket would be permitted on the Development Site in the future with the Proposed Actions. Therefore, the Proposed Actions have the potential to provide more New Yorkers access to fresh foods, which is consistent with the goals of the FRESH program.

The Proposed Actions would not affect other public policies applicable to the Project Area, and would not result in any significant adverse impacts to public policy. ✷

A. INTRODUCTION

This attachment assesses the potential impacts of the Proposed Actions on open space resources. Open space is defined in the 2014 *City Environmental Quality Review (CEQR) Technical Manual* as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or serves to protect or enhance the natural environment. An open space assessment should be conducted if a project would have a direct effect on open space, such as eliminating or altering a public open space, or an indirect effect, such as when a substantial new population could place added demand on an area's open spaces.

As discussed in Attachment A, "Project Description and Screening Analyses," the Proposed Actions are expected to result in the development of an approximately 444,289 gross square foot (gsf) mixed-use building located at 270 Nostrand Avenue (Block 1778, Lot 55 – the "Development Site") in the Bedford Stuyvesant neighborhood of Brooklyn, Community District 3. The Proposed Development would contain 487 dwelling units (DU), approximately 22,285 gsf of commercial space (local retail) in the cellar and ground floors, and approximately 1,128 gsf of ground floor community facility space (assumed as a medical office).

When compared to the anticipated No Action condition of the Development Site, the Proposed Development would result in an increment of 182 DUs, an increase of approximately 22,285 gsf of commercial space, and a net decrease of approximately 23,932 gsf of community facility space. As discussed in more detail below, the Proposed Development would result in the introduction of residential and non-residential uses that would increase the residential and non-residential populations on the Development Site and in the study area. Therefore, in accordance with *CEQR Technical Manual* guidelines, an open space assessment was conducted to determine whether the Proposed Actions would result in significant adverse open space impacts. This assessment finds that the Proposed Actions would not result in significant adverse open space impacts.

B. METHODOLOGY

As defined by the *CEQR Technical Manual*, public open space is accessible to the public on a constant and regular basis, including for designated daily periods. Public open space may be under government or private jurisdiction and typically includes City, state, and federal parkland, esplanades, and plazas designated through regulatory approvals such as zoning. Private open space is not publicly accessible or is available only to limited users. It is not available to the public on a regular or constant basis. Examples of private open space are natural areas with no public access, community gardens, front and rear yards, rooftop recreational facilities, and stoops or landscaped grounds used by community facilities, such as public and private educational institutions, where the open space is accessible only to the institution-related population.

Open spaces can be characterized as either active or passive depending on the activities the space allows. In many cases, open space may be used for both active and passive recreation. Open space that is used for sports, exercise, or active play is classified as "active open space," and consists

primarily of recreational facilities. Passive open spaces are used for relaxation, such as sitting or strolling. Active and passive open spaces are further defined in Section C, "Existing Conditions."

DIRECT EFFECTS

According to the *CEQR Technical Manual*, a proposed development would directly affect open space conditions if it causes the loss of public open space, changes the use of an open space so that it no longer serves the same user population, limits public access to an open space, or results in increased noise or air pollutant emissions, odor, or shadows that would temporarily or permanently affect the usefulness of a public open space.

The Proposed Actions would not directly affect public open space resources on or near the Development Site, and therefore no further analysis of direct effects is necessary.

INDIRECT EFFECTS

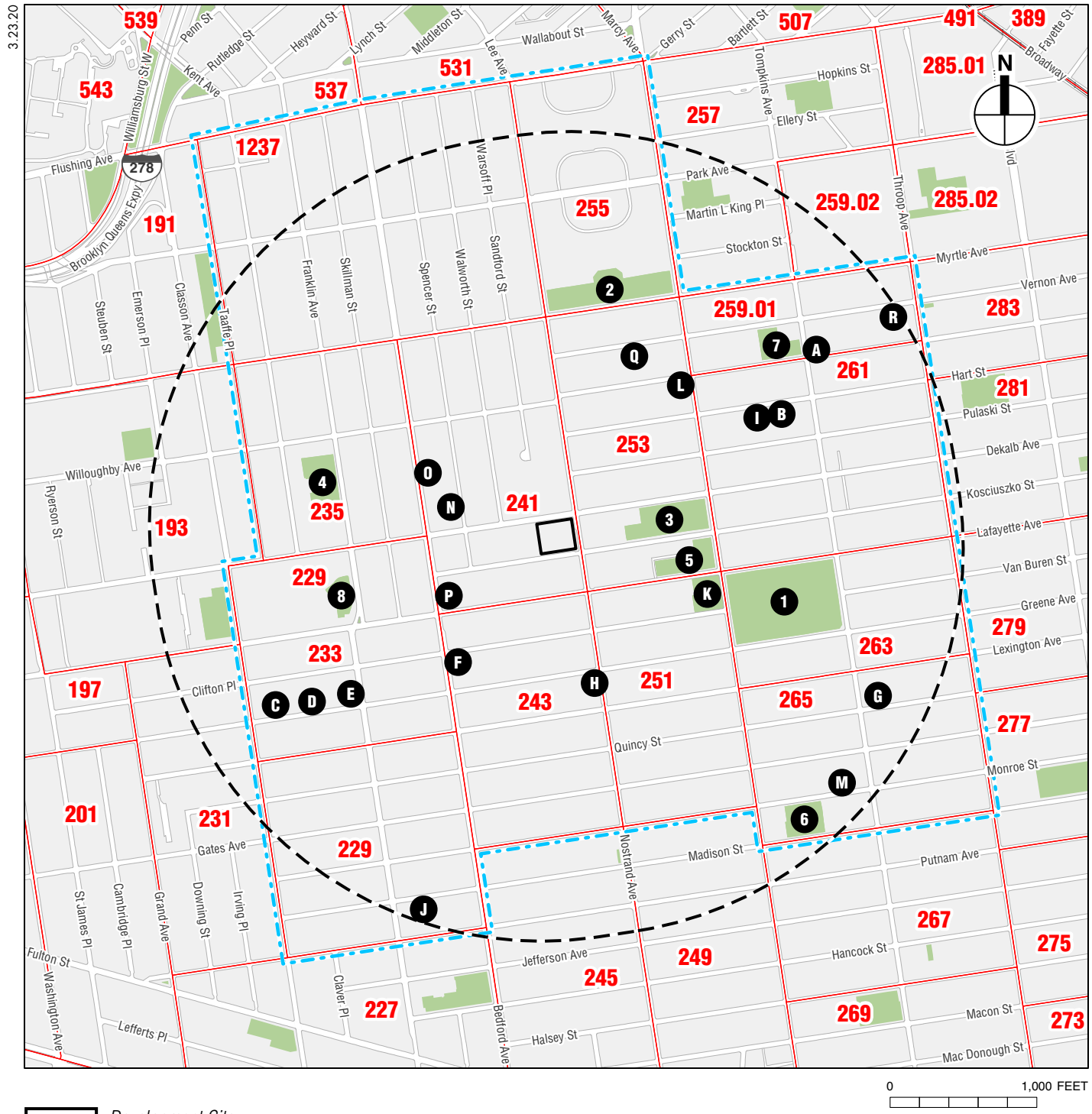
As described in the *CEQR Technical Manual*, open space can be indirectly affected by a proposed action if a project would add enough population, either residential or non-residential, to noticeably diminish the capacity of open space in the area to serve the future population. If a proposed project is not located within an underserved or well-served area, such as the Development Site, an open space assessment should be conducted if that project would generate more than 200 residents or 500 employees. In accordance with *CEQR Technical Manual* guidelines, the open space analysis and impact assessment is based on the proposed redevelopment of the Development Site. As discussed in Attachment A, "Project Description and Screening Analyses," the Proposed Development would introduce up to 182 incremental DUs, which would introduce approximately 499 new residents to the study area (based on the average household size of 2.74 for Brooklyn Community District 3) as compared with the Future without the Proposed Actions (the No Action condition). In addition, the Proposed Development would introduce approximately 95 new workers. Therefore, an open space assessment for only the residential population generated by the Proposed Development is warranted.

STUDY AREA

The *CEQR Technical Manual* recommends establishing a study area or areas as the first step in an open space assessment. The study areas are based on the distances that the respective users—workers and residents—are likely to walk to an open space. According to the *CEQR Technical Manual*, workers are assumed to walk approximately 10 minutes, or ¼-mile from their place of work to an open space, while residents are assumed to walk approximately 20 minutes, or ½-mile to an open space.

Because the Proposed Development would only introduce new residential population above the 200-resident population threshold and not a substantial enough worker population to exceed the 500-worker threshold, the adequacy of open space resources was assessed for the ½-mile (residential) study area. This study area was adjusted to include all census tracts with at least 50 percent of their area within the ½-mile boundary. In this way, the study area allows for analysis of both the open spaces in the area as well as population data. As shown on **Figure C-1**, the ½-mile residential study area includes the area within Census Tracts 229, 233, 235, 241, 243, 251, 253, 255, 259.01, 261, 263, 265, and 1237.

As shown on **Figure C-1**, the residential open space study area is generally bounded by Flushing Avenue to the north, Throop Avenue and Marcy Avenue to the east, Putnam Avenue, Monroe Street, and Madison Street to the south, and Taaffe Place and Classon Avenue to the west.



Development Site

Half-mile Radius

Residential Study Area

201 *Census Tracts*

1 *Publicly Accessible Open Space Resource*

A *Community Gardens*

Open Space Study Area and Resources

270 NOSTRAND AVENUE

Figure C-1

ANALYSIS FRAMEWORK

CEQR Technical Manual methodology suggests conducting an initial quantitative assessment to determine whether more detailed analyses are appropriate, but also recognizes that for projects that introduce a large population in an area that is neither well served nor underserved by open space, it may be clear that a full, detailed analysis should be conducted. Because the Proposed Development would introduce a sizeable new residential population to the study area, a preliminary analysis was not performed and a detailed analysis was conducted.

With an inventory of available open space resources and potential users, the adequacy of open space in the study areas can be assessed both quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain guidelines. The qualitative assessment examines other factors that may affect conclusions about adequacy, including proximity to additional resources beyond the study area, the availability of private recreational facilities, and the demographic characteristics of the area's population. Specifically, the analysis in this attachment includes:

- Characteristics of the open space residents. To determine the number of residents in the study areas, 2017 American Community Survey (ACS) data have been compiled for census tracts comprising the residential open space study areas.
- An inventory of all publicly accessible passive and active recreational facilities in the residential open space study area.
- An assessment of the quantitative ratio of open space in the study area is conducted by computing the ratio of open space acreage to the residential population in the study area and comparing this open space ratio with certain guidelines. In New York City, local open space ratios (OSR) vary widely, and the median ratio at the Citywide Community District (CD) level is 1.5 acres of open space per 1,000 residents. Typically, for the assessment of both direct and indirect effects, citywide local norms have been calculated for comparison and analysis. As a planning goal, a ratio of 2.5 acres per 1,000 residents represents an area well-served by open spaces, and is consequently used as an optimal benchmark for residential populations in large-scale proposals. Ideally, this would comprise 0.50 acres of passive space and 2.0 acres of active open space per 1,000 residents. For such large-scale projects (and for planning purposes), the City also seeks to attain its planning goal of a balance of 80 percent active open space and 20 percent passive open space. The City's planning goal is based, in part, on National Recreation and Park Association guidelines of 1.25 to 2.5 acres per 1,000 residents of neighborhood parks within ½-mile, 5 to 8 acres per 1,000 residents of community parks within 1 to 2 miles, and 5 to 10 acres per 1,000 residents of regional parks within a 1-hour drive of urban areas.
- An evaluation of qualitative factors affecting open space use.
- A determination of the adequacy of open space in the residential open space study area in the existing conditions and No Action and With Action conditions.
- An assessment of expected changes in future levels of open space supply and demand in the 2023 analysis year, based on other planned development projects within the open space study area. To estimate the population expected in the study areas in the No Action condition, the average household size of occupied housing units in Brooklyn (2.75 persons) is applied to the

number of new housing DUs expected in the study area.[1] Any new open space or recreational facilities that are anticipated to be operational by the analysis year are also accounted for. OSRs are calculated for No Action and With Action conditions and compared to determine changes in future levels of adequacy.

IMPACT ASSESSMENT

Impacts are based in part on how a project would change the OSR in the study areas. According to the *CEQR Technical Manual*, an open space ratio decrease is generally considered to be a significant adverse impact, warranting a detailed analysis, if it would approach or exceed 5 percent. If a study area exhibits a low open space ratio, indicating a shortfall of open space, smaller decreases in that ratio as a result of the action may constitute significant adverse impacts. In addition to the quantitative factors cited above, the *CEQR Technical Manual* also recommends consideration of qualitative factors in assessing the potential for open space impacts. These include the availability of nearby destination resources, the beneficial effects of new open space resources provided by a project, and the comparison of projected OSRs with established City guidelines. It is recognized that the OSRs of the City guidelines presented are not feasible for many areas of the City, and they are not considered impact thresholds on their own. Rather, these are benchmarks that indicate how well an area is served by open space. When assessing the effects of a change in the open space ratio, the assessment should consider the balance of passive and active open space resources appropriate to support the affected population and the condition of existing open spaces within the study area. Determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment. Qualitative considerations such as the distribution of open space, whether an area is considered "well-served" or "underserved" by open space, the distance to regional parks, the connectivity of open space, and any additional open space provided by a project, should also be considered in a determination of significance.

C. EXISTING CONDITIONS

STUDY AREA POPULATION

RESIDENTIAL (½-MILE) STUDY AREA

As shown in **Table C-1**, 2017 ACS data indicates that the residential open space study area has a population of approximately 50,946 residents.

[1] Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates.

Table C-1
Study Area Residential Population

Census Tract[1]	Residential Population
229	3,862
233	5,153
235	4,062
241	2,501
243	4,020
251	3,547
253	2,936
255	5,569
259.01	2,158
261	4,993
263	1,834
265	4,011
1237	6,300
Residential Study Area Total	**50,946**

Note: [1] See **Figure C-1** for a map of census tracks included in the study area.
Sources: U.S. Census Bureau, ACS 2013–2017 5-Year Estimates

AGE DISTRIBUTION

The age distribution of the residential population affects the way open spaces are utilized and the various recreational facilities needed for the community. As outlined in the *CEQR Technical Manual*, children 4 years old or younger typically use traditional playgrounds that have play equipment for toddlers and preschool children. Children 5 years old through 9 years old use traditional playgrounds as well as grassy and hard-surfaced open spaces, which are important for activities, such as ball playing, running, and skipping rope. Children 10 years old through 14 years old use playground equipment, court spaces, little league fields, and other sports fields. Teenagers and young adults use court game facilities such as handball and basketball courts, and larger open spaces for field sports. Adults 20 years old through 64 years old continue to use court game facilities and fields for sports, and also engage in more individualized recreation activities, such as cycling and jogging, which require bike paths, promenades, and other vehicle-free roadways. For these activities, adults have greater mobility to seek active recreation outside of the ½-mile study area. Adults also gather with families for picnicking, ad hoc active sports, such as Frisbee, as well as recreational activities in which all ages can participate. Seniors engage in active recreation, such as handball, tennis, and swimming, as well as recreation that requires passive facilities.

Table C-2 summarizes the distribution of the study area's residential population by age group and compares this age distribution to those of Brooklyn and New York City. As shown below, the study area's age distribution is broadly in line with those of Brooklyn and New York City, with the study area generally being slightly younger. In the study area, 8.6 percent of the population is younger than five years old and 7.4 percent of the population is between 5 years old and 9 years old. Both of these populations represent slightly higher percentages than in Brooklyn and New York City as a whole (which are 7.4 and 6.6 percent for population under 5 years old and 6.3 and 5.7 percent for between 5 years old and 9 years old, respectively). The study area has a similar percentage of its population between 10 years old and 17 years old (9.7 percent) compared to Brooklyn (9.4 percent), both of which are slightly higher than in New York City as a whole (8.8 percent). Correspondingly, the study area has a slightly lower percentage of the population over

64 years old (8.6 percent) compared to Brooklyn and New York City (12.8 and 13.6 percent, respectively). The population between 18 years old and 64 years old (65.9 percent) is broadly in line with Brooklyn and New York City as a whole (64.1 percent and 65.5 percent, respectively).

Table C-2
Study Area Residential Population Age Distribution

	Study Area		Brooklyn		New York City	
Age Category	**Persons**	**Percent**	**Persons**	**Percent**	**Persons**	**Percent**
Under 5 Years	4,360	8.6	196,132	7.4	560,358	6.6
5 to 9 Years	3,752	7.4	165,189	6.3	486,318	5.7
10 to 17 Years	4,924	9.7	247,494	9.4	747,968	8.8
18 to 64 Years	33,544	65.9	1,688,565	64.1	5,597,160	65.5
65 Years and Over	4,366	8.6	337,741	12.8	1,168,268	13.6
Total	**50,946**	**100%**	**2,635,121**	**100%**	**8,560,072**	**100%**

Source: U.S. Census Bureau, ACS 2013–2017 5-Year Estimates

INVENTORY OF PUBLICLY ACCESSIBLE OPEN SPACE

According to the *CEQR Technical Manual*, open space may be public or private and may be used for active or passive recreational purposes. In accordance with the *CEQR Technical Manual*, publicly accessible open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts using both a quantitative and a qualitative analysis, whereas private open space is not accessible to the general public on a regular basis and is considered qualitatively. In addition to residential buildings, most New York City Housing Authority (NYCHA) developments contain ancillary facilities for its residents such as community centers, child care facilities, and recreational amenities, such as basketball courts and the landscaped grounds between buildings. Some NYCHA developments contain passive seating areas that are available for NYCHA residents and the public. Over time, playgrounds and small parks have been carved out of larger NYCHA superblocks. Today, these open spaces are maintained for public use by the New York City Department of Parks and Recreation (NYC Parks). In order to ensure a conservative analysis, open spaces on NYCHA developments that appear publicly accessible are considered in the qualitative assessment. Those resources intended for use by NYCHA residents are discussed qualitatively. Similarly, community gardens located on NYC Parks-controlled property, gardens operating under the City's GreenThumb program, or gardens on private property operated by a non-governmental organization such as a foundation or local community development organization are considered in the qualitative assessment. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the residential study area.

An open space is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, lawns, and paved areas for active recreation. Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas. However, some passive spaces can be used for both passive and active recreation; a green lawn or riverfront walkway, for example, can also be used for ball playing, jogging, or rollerblading.

RESIDENTIAL (½-MILE) STUDY AREA

As shown in **Table C-3** and **Figure C-1**, the residential study area contains a total of eight publicly accessible open space resources totaling approximately 19.58 acres. Of this total, approximately 13.91 acres (71 percent) is active space and 5.67 acres (29 percent) is passive space.

The largest public open space resource within the study area is Herbert Von King Park, totaling 7.82 acres of which approximately half is for active uses and half is for passive uses. Herbert Von King Park is in good condition and is well patronized, experiencing medium utilization. Features of the park include walking pathways, benches, basketball, handball, baseball, playground equipment, lawn areas, flagpoles, water fountains, an amphitheater with a stage, a cultural center, an urban garden, picnic tables, BBQ areas, bleachers, dog-friendly areas, spray showers, and fitness equipment.

Marcy Playground is the second largest public open space resource in the study area, followed by the Kosciuszko Pool. Marcy Playground is 3.20 acres in size, with roughly 75 percent of that area dedicated to active uses. The playground is in good condition and experiences medium utilization. Features include handball, playground equipment, spray showers, volleyball, tennis, basketball, fitness equipment, garden areas, bleachers, bike racks, chess tables, benches, and swings. Kosciuszko Pool is a public pool that is 2.39 acres in size, the majority of which is dedicated to active swimming uses (approximately 90 percent). The pool is in good condition, and is highly utilized when open for the season. Kosciuszko Pool features include an Olympic-sized swimming pool, a wading pool, a mushroom water feature, locker rooms, and grand stands.

Star Spangled Playground, Banneker Playground, and Hattie Carthan Playground are the other public open space resources in the study area that are more than one acre in size. Star Spangled Playground is 1.69 acres, most of which is for active use. The playground is in good condition and has low utilization. This playground is part of the Schoolyards to Playgrounds program under which Department of Education (DOE) playgrounds are opened to the public during non-school hours, and is jointly operated by the DOE and NYC Parks. Its features include a rugby field, fitness equipment, a running track, bleachers, benches, playground equipment, chess tables, basketball, handball, swings, spray showers, and bathrooms. Banneker Playground is 1.67 acres in size and also primarily dedicated to active recreation. The playground is in good condition and has low utilization. Features include playground equipment, swings, spray showers, a flagpole, basketball, handball, and bathrooms. Hattie Carthan Playground, also a part of the Schoolyards to Playgrounds program, is 1.20 acres in size and serves primarily active uses. The playground is in adequate condition and has low utilization. Features include playground equipment, benches, bathrooms, a flagpole, basketball, water fountains, handball, and swings.

The remaining open space resources, Willoughby Playground and Lafayette Gardens Playground, are less than one acre in size. Willoughby Playground, another member of the Schoolyards to Playgrounds program, is 0.91 acres in size, primarily active in use, is in good condition, and has medium utilization. Its features include chess tables, a flagpole, playground equipment, benches, swings, spray showers, basketball, and handball. Lafayette Gardens Playground is the smallest public open space resources in the study area at 0.70 acres, approximately three quarters of which is for active recreation. The playground is in adequate condition and has low utilization. Playground features include basketball, benches, playground equipment, handball, spray showers, swings, and a flagpole.

Table C-3
Inventory of Publicly Accessible Open Space in the Residential Study Area

Map No.[1]	Name	Location	Owner/ Agency	Amenities	Total Acres	Active		Passive		Condition	Utilization
						Acres	%	Acres	%		
1	Herbert Von King Park	Lafayette Avenue, Tompkins Avenue, Greene Avenue, and Marcy Avenue	NYC Parks	Walking pathways, benches, basketball, handball, baseball, playground equipment, lawn areas, flagpole, water fountains, amphitheater and stage, cultural center, urban garden, picnic tables, BBQ areas, bleachers, dog-friendly areas, bathrooms, spray showers, fitness equipment	7.82	3.91	50%	3.91	50%	Good	Medium
2	Marcy Playground	Marcy Avenue, Myrtle Avenue, and Nostrand Avenue	NYC Parks	Handball, playground equipment, spray showers, volleyball, tennis, basketball, fitness equipment, garden areas, bleachers, bike racks, chess tables, benches, swings	3.20	2.40	75%	0.80	25%	Good	Medium
3	Kosciuszko Pool	Dekalb Avenue, Marcy Avenue, and Kosciuszko Street	NYC Parks	Olympic-sized swimming pool, wading pool, mushroom water feature, locker rooms, grand stands	2.39	2.15	90%	0.24	10%	Good	High
4	Star Spangled Playground	Franklin Avenue between Willoughby Avenue and Dekalb Avenue	NYC Parks and DOE	Rugby field, fitness equipment, running track, bleachers, benches, playground equipment, chess tables, basketball, handball, swings, spray showers, bathrooms	1.69	1.52	90%	0.17	10%	Good	Low
5	Banneker Playground	Lafayette Avenue and Marcy Avenue	NYC Parks	Playground equipment, swings, spray showers, flagpole, basketball, handball, bathrooms	1.67	1.50	90%	0.17	10%	Good	Low
6	Hattie Carthan Playground	Madison Street and Monroe Street between Marcy Avenue and Tompkins Avenue	NYC Parks and DOE	Playground equipment, benches, bathrooms, flagpole, basketball, water fountains, handball, swings	1.20	1.08	90%	0.12	10%	Adequate	Low
7	Willoughby Playground	Vernon Avenue, Tompkins Avenue, and Willoughby Avenue	NYC Parks and DOE	Chess tables, bathrooms, flagpole, playground equipment, benches, swings, spray showers, basketball, handball	0.91	0.82	90%	0.09	10%	Good	Medium
8	Lafayette Gardens Playground	Franklin Avenue and Lafayette Avenue	NYC Parks	Basketball, benches, playground equipment, handball, spray showers, swings, flagpole	0.70	0.53	75%	0.18	25%	Adequate	Low
Totals	**N/A**	**N/A**	**N/A**	**N/A**	**19.58**	**13.91**	**N/A**	**5.67**	**N/A**	**N/A**	**N/A**

Notes:
[1] See **Figure C-1** for a map of open space resources.
Sources: NYC Parks; Field Surveys, September 2019; MapPLUTO

In addition, there are several open space resources that may be available for use by study area residents, including NYCHA open spaces and an extensive inventory of community gardens that have not been incorporated into the quantitative assessment of open space adequacy. These open spaces are discussed qualitatively below.

ASSESSMENT OF OPEN SPACE ADEQUACY

RESIDENTIAL (½-MILE) STUDY AREA

The following analysis of the adequacy of open space resources within the residential open space study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents, as well as the ratio of passive open space per 1,000 combined residents and workers.

Quantitative Assessment

With a total of 19.58 acres of open space, of which approximately 13.91 acres are for active use (approximately 71 percent) and approximately 5.67 acres are for passive use (approximately 29 percent), and a total residential population of 50,946, the residential open space study area has an overall open space ratio of 0.384 acres per 1,000 residents (see **Table C-4**). This is lower than the City's planning guideline of 2.5 acres of combined active and passive open space per 1,000 residents. The study area's residential active and passive OSRs are 0.273 acres and 0.111 acres per 1,000 residents, respectively, which is below the *CEQR Technical Manual* guideline of 2.0 acres of active open space and below the *CEQR Technical Manual* guideline of 0.5 acres of passive open space per 1,000 residents.

Table C-4
Adequacy of Open Space Resources: Existing Conditions

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residential (½-Mile) Study Area										
Residents	50,946	19.58	13.91	5.67	0.384	0.273	0.111	2.50	2.00	0.50
Note: There may be a small discrepancy within the number values above due to rounding.										

Qualitative Assessment

As shown in **Table C-3**, the residential study area open spaces include a wide variety of actively programmed open spaces appropriate for the residential user groups, including children, teenagers, and adults. The quantified deficiency of open space resources within the residential study area is partially ameliorated by several factors. Additional public open spaces are located just outside of the study area. While residents on or near the Development Site are unlikely to make use of these open spaces, they are within ½-mile of much of the study area, and residents located towards the edges of the study area would be likely to utilize them. These open spaces include John Hancock Playground, Potomac Playground, Raymond Bush Playground, Stockton Playground, Middleton Playground, Classon Triangle, Classon Playground (on Flushing Avenue), the Naval Cemetery Landscape, Steuben Playground, Taaffe Playground, Pratt Playground, Classon Playground (on Lafayette Avenue), and Cripus Attucks Playground. These parks are similar to and feature many of the same amenities as those detailed in **Table C-3**. Fort Greene Park and Prospect Park, two large destination parks that may be utilized by study area residents, are located approximately one mile to the west and one and a half miles to the south, respectively.

Additional open space within the study area is contained within the boundaries of two NYCHA housing complexes (NYCHA's Lafayette Gardens and Marcy Houses complexes). The open spaces within these NYCHA housing complexes generally offer access to playgrounds and basketball courts, with some benches for seating. These facilities are excluded from the quantitative analysis because they are for the sole use of NYCHA residents and are generally not open to the public; however, NYCHA developments are a significant presence in the residential study area and house thousands of the residents. These residents are likely to take advantage of the on-site NYCHA open spaces, reducing demand on the public open spaces in the study area listed above.

As noted above, there is also an extensive array of community gardens within the study area that have not been incorporated into the quantitative assessment in order to provide a conservative analysis. Containing a total of 2.96 acres of passive open space, these community gardens may be used by residents within the study area (see **Table C-5**) and are generally programed with exclusively passive recreational features, and may contain amenities such as seating, planted areas, grills, and tables. Public access to community gardens is not uniform and the duration and timing of public access varies from garden to garden. Generally, public hours for several days of the week are posted at the entrance to the community garden. While community gardens may be open to the public outside of these posted hours, they are generally locked and inaccessible. The gardens are owned by either NYC Parks (through the Greenthumb program) or the New York Restoration Project (NYRP).

Table C-5
Community Gardens in the Study Area

Map No.[1]	Name	Location	Owner/ Agency	Total Acres
A	All People's Garden	Tompkins Avenue and Willoughby Avenue	NYC Parks	0.07
B	American Heart Garden	Hart Street between Tompkins Avenue and Marcy Avenue	NYC Parks	0.05
C	Cedar Tree Garden	Greene Avenue between Franklin Avenue and Classon Avenue	NYRP	0.19
D	Jane Bailey Memorial Garden	Green Avenue between Franklin Avenue and Classon Avenue	NYRP	0.10
E	Greene Acres Community Garden	Franklin Avenue and Greene Avenue	NYRP	0.26
F	Clifton Place Memorial Park and Garden	Clifton Place and Bedford Avenue	NYC Parks	0.17
G	First Quincy Street Community Garden	Quincy Street between Throop Avenue and Tompkins Avenue	NYC Parks	0.13
H	Greene Avenue United Neighbors Association Garden	Greene Avenue and Nostrand Avenue	NYC Parks	0.05
I	Hart to Hart Community Garden	Hart Street between Tompkins Avenue and Marcy Avenue	NYC Parks	0.32
J	Madison Street Block Association Garden	Madison Street between Bedford Avenue and Franklin Avenue	NYC Parks	0.08
K	Magnolia Tree Earth Center	Lafayette Avenue, Marcy Avenue, and Clifton Place	NYC Parks	0.81
L	Red Gate Garden	Marcy Avenue and Willoughby Avenue	NYC Parks	0.10
M	Shiloh Garden	Monroe Street between Tompkins Avenue and Marcy Avenue	NYC Parks	0.07
N	Spencer Street Community Garden	Spencer Street between Willoughby Avenue and Dekalb Avenue	NYC Parks	0.04
O	Target Brooklyn Community Garden	Bedford Avenue between Willoughby Avenue and Dekalb Avenue	NYRP	0.10
P	Whole Neighborhood Garden	Bedford Avenue between Kosciuszko Street and Lafayette Avenue	NYC Parks	0.09
Q	Vernon Cases Community Garden	Vernon Avenue between Marcy Avenue and Nostrand Avenue	NYC Parks	0.17
R	Vernon Tandt Block Association Garden	Vernon Avenue between Throop Avenue and Tompkins Avenue	NYC Parks	0.16
			Total	**2.96**

Note:
[1] See **Figure C-1** for a map of open space resources.
Sources:
NYC Parks; Field Surveys, September 2019; MapPLUTO

D. THE FUTURE WITHOUT THE PROPOSED ACTIONS

As detailed in Attachment A, "Project Description and Screening Analyses," it is anticipated that in the absence of the Proposed Actions, the applicant is likely to develop an as-of-right residential and community facility building on the Development Site consistent with the existing zoning (the No Action Development). The No Action Development would contain 305 DUs and approximately 25,060 gsf of community facility space.

INDIRECT EFFECTS

STUDY AREA POPULATION

The construction of the No Action Development would result in 305 new DUs that would add approximately 839 additional residents to the study area compared to the existing condition. Additionally, there are 23 moderate- to large-sized known development projects within the ½-mile study area that are anticipated to result in 954 additional DUs by the 2023 build year. Of these 23 known development projects, two are found within 400 feet of the Development Site, as shown in Table B-2 and Figure B-3 in Attachment B, "Land Use, Zoning, and Public Policy." The 954 additional DUs anticipated would introduce 2,624 additional residents to the ½-mile open space study area by the 2023 build year. In addition, a 0.5 percent background growth rate was applied for years 2020, 2021, 2022, and 2023. When combining the new residents expected to result from the Applicant's No Action Development, the 23 known development projects within the study area, and the 0.5 percent background growth projection to 2023, the population of the study area is expected to increase by approximately 4,544 residents between the existing and No Action condition, to a total of approximately 55,490 residents.

ASSESSMENT OF OPEN SPACE ADEQUACY

RESIDENTIAL (½-MILE) STUDY AREA

The following analysis of the adequacy of open space resources within the residential study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents.

Quantitative Assessment

As shown below in **Table C-6**, in the No Action condition, the total open space ratio is projected to fall from 0.384 acres per 1,000 residents to 0.353 acres per 1,000 residents. The active open space ratio would fall from 0.273 to 0.251 acres per 1,000 residents, and the passive open space ratio would fall from 0.111 to 0.102 acres per 1,000 residents. Similar to existing conditions, all of these OSRs fall below the City guidelines of 2.5 acres of total open space per 1,000 residents, 2.0 acres of active open space per 1,000 residents, and 0.5 acres of passive open space per 1,000 residents. As noted above this shortfall is one that currently exists within the open space study area.

Table C-6
Adequacy of Open Space Resources: No Action Condition

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	55,490	19.58	13.91	5.67	0.353	0.251	0.102	2.50	2.00	0.50
Note: There may be a small discrepancy within the number values above due to rounding.										

Qualitative Assessment

In the No Action condition, no major changes to the open spaces within the area are anticipated, and qualitative conditions would be similar to those described under existing conditions. Several additional open space resources such as community gardens and NYCHA open spaces that were not analyzed in the quantitative assessment would continue to be available to residents for use within the open space study area.

E. THE FUTURE WITH THE PROPOSED ACTIONS

INDIRECT EFFECTS

According to the *CEQR Technical Manual*, a proposed action may result in a significant indirect impact on open space resources if it would reduce the open space ratio and consequently result in the overburdening of existing facilities or further exacerbating a deficiency in open space.

STUDY AREA POPULATION

When compared to the existing and No Action condition of the Development Site, the Proposed Development would result in an increment of 182 DUs, an increase of approximately 22,272 gsf of local retail space, and a decrease of approximately 23,926 gsf of community facility uses. The additional 182 DUs will add another 500 residents to the population of the study area compared to the No Action condition, bringing the total population to 55,990 with the Proposed Development. The resulting OSRs are shown in **Table C-7**.

Table C-7
Adequacy of Open Space Resources: With Action Condition

		Open Space Acreage			Open Space Ratios per 1,000 Persons			*CEQR Technical Manual* Open Space Guidelines		
	Population	Total	Active	Passive	Total	Active	Passive	Total	Active	Passive
Residents	55,990	19.58	13.91	5.67	0.350	0.248	0.101	2.50	2.00	0.50
Note: There may be a small discrepancy within the number values above due to rounding.										

ASSESSMENT OF OPEN SPACE ADEQUACY

RESIDENTIAL (½-MILE) STUDY AREA

Quantitative Assessment

As shown in **Table C-7**, in the Future with the Proposed Actions (the With Action condition) the total open space ratio is projected to fall from 0.353 acres per 1,000 residents in the No Action condition to 0.350 acres per 1,000 residents. The active open space ratio would decrease from 0.251 acres to 0.248 acres per 1,000 residents, and the passive open space ratio would decrease from 0.102 to 0.101 acres per 1,000 residents. Similar to existing conditions, all of these OSRs fall below the City guidelines of 2.5 acres of total open space per 1,000 residents, 2.0 acres of active open space per 1,000 residents, and 0.5 acres of passive open space per 1,000 residents. As noted above, this shortfall is one that currently exists within the open space study area and would continue to exist absent the Proposed Actions.

Per the CEQR guidance, a significant adverse open space impact may occur if a proposed action would reduce the open space ratio by more than 5 percent in areas that are currently below the City's median CD open space ratio of 1.5 acres per 1,000 residents. These reductions may result in overburdening existing facilities or further exacerbating a deficiency in open space. **Table C-8** shows the percentage change from the No Action condition to the With Action condition for the residential study area. These changes represent a decrease of 0.85 percent in the total open space ratio, a decrease of 1.20 percent in the active open space ratio, and a decrease of 0.98 percent in the passive open space ratio.

Table C-8
Open Space Ratio Summary

Ratio	*CEQR Technical Manual* Open Space Guideline	Open Space Ratios per 1,000			Percent Change (With Action)
		Existing	No Action	With Action	
Residential (½-Mile) Study Area					
Total—Residents	2.5	0.384	0.353	0.350	-0.85%
Active—Residents	2.0	0.273	0.251	0.248	-1.20%
Passive—Residents	0.5	0.111	0.102	0.101	-0.98%

Qualitative Assessment

In the With Action condition, no major changes to the open spaces within the area are anticipated and qualitative conditions would be similar to those described under the existing conditions and No Action condition. Several additional open space resources such as community gardens and NYCHA open spaces that were not analyzed in the quantitative assessment would continue to be available to residents for use within the open space study area.

The Proposed Development would also provide several recreational spaces within the building that would ameliorate the impact that its additional residents would have on the study area's open spaces, as residents are likely to use in-building recreational spaces before walking to other resources within the study area. The Proposed Development includes an inner court on the second floor, open terraces around the exterior of the building on the ninth floor, several private terraces for DUs on the 11th and 13th floors, outdoor common spaces for tenants located on 13th-floor terraces, an approximately 6,000 sf recreational spaces on the 14th floor, and an outdoor common space for tenants on the roof. Generally, these spaces would be programed with outdoor passive recreational features typically found in multifamily developments, such as outdoor seating/lawn chairs, gardens, barbeque areas, and dog runs. As the programing of these spaces advances, some active recreational features may also be included.

CONCLUSION

Though all of the OSRs in the study area would be below the City's guidelines, the Proposed Actions would reduce OSRs by a maximum of 1.20 percent, well below the *CEQR Technical Manual* threshold of a 5 percent reduction in the open space ratio to constitute a significant adverse impact. The open space study area is already experiencing a shortfall in all categories of open space, but the shortfall would not be substantially increased by the Proposed Actions. Furthermore, in addition to the publicly accessible open space resources, residents of the study area and of the Proposed Development would have access to several additional open space resources such as public open space resources just outside of the study area and community gardens within it. NYCHA residents would also be able to utilize open spaces found at NYCHA developments. These resources are located within or near the study area and have not been included in the quantitative assessment, but would be available for use for many of the residents within the study area. Therefore, the Proposed Actions would not have any significant adverse impacts on open space resources. ✷

Attachment D: Shadows

A. INTRODUCTION

The Proposed Development would be 14 stories tall, reaching a maximum height of approximately 154 feet including rooftop mechanical structures. This attachment assesses the potential for the Proposed Development to cast new shadows on sunlight-sensitive resources. Following the guidelines of the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, sunlight-sensitive resources include publicly accessible parks and open space, sunlight-dependent features of historic resources, and natural resources that depend on sunlight. Therefore, this assessment includes information presented in Attachment C, "Open Space," and Attachment E, "Historic and Cultural Resources."

The assessment concluded that the Proposed Development would cast new shadow on a small area at the western end of the Kosciuszko Pool property for one minute at the end of the May 6/August 6 representative analysis day, and would not cast any new shadow on the June 21 analysis day, and that the limited extent and duration of new shadow would not significantly impact the use of the pool. No other sunlight-sensitive resources would be affected by project-generated shadow.

B. DEFINITIONS AND METHODOLOGY

This analysis has been prepared in accordance with New York City CEQR procedures and follows the guidelines of the *CEQR Technical Manual*.

DEFINITIONS

Incremental shadow is the additional, or new, shadow that a structure resulting from a proposed project would cast on a sunlight-sensitive resource.

Sunlight-sensitive resources are those that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Such resources generally include the following:

- *Public open space* such as parks, beaches, pools, playgrounds, plazas, schoolyards (if open to the public during non-school hours), greenways, and landscaped medians with seating. Planted areas within unused portions of roadbeds that are part of the Greenstreets program are also considered sunlight-sensitive resources.
- *Features of architectural resources that depend on sunlight for their enjoyment by the public.* Only the sunlight-sensitive features need be considered, as opposed to the entire resource. Such sunlight-sensitive features might include: design elements that depend on the contrast between light and dark (e.g., recessed balconies, arcades, deep window reveals); elaborate, highly carved ornamentation; stained glass windows; historic landscapes and scenic landmarks; and features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as a historic landmark.

- *Natural resources* where the introduction of shadows could alter the resource's condition or microclimate. Such resources could include surface water bodies, wetlands, or designated resources such as coastal fish and wildlife habitats.

Non-sunlight-sensitive resources include the following, for the purposes of CEQR:

- *City streets and sidewalks* (except Greenstreets);
- *Private open space* (e.g., front and back yards, stoops, vacant lots, and any private, non-publicly accessible open space); and
- *Project-generated open space* cannot experience a significant adverse shadow impact from the project, according to CEQR, because without the project the open space would not exist. However, a discussion of how shadows would affect the new space may be warranted.

A significant adverse shadow impact occurs when the incremental shadow added by a proposed project falls on a sunlight-sensitive resource and substantially reduces or completely eliminates direct sunlight, thereby significantly altering the public's use of the resource or threatening the viability of vegetation or other resources. Each case must be considered on its own merits based on the extent and duration of new shadow and an analysis of the resource's sensitivity to reduced sunlight.

METHODOLOGY

Following the guidelines of the *CEQR Technical Manual*, a preliminary screening assessment must first be conducted to ascertain whether a project's shadow could reach any sunlight-sensitive resources at any time of year. The preliminary screening assessment consists of three tiers of analysis. The first tier determines a simple radius around the proposed building representing the longest shadow that could be cast. If there are sunlight-sensitive resources within this radius, the analysis proceeds to the second tier, which reduces the area that could be affected by project shadow by accounting for the fact that shadows can never be cast between a certain range of angles south of the project site due to the path of the sun through the sky at the latitude of New York City.

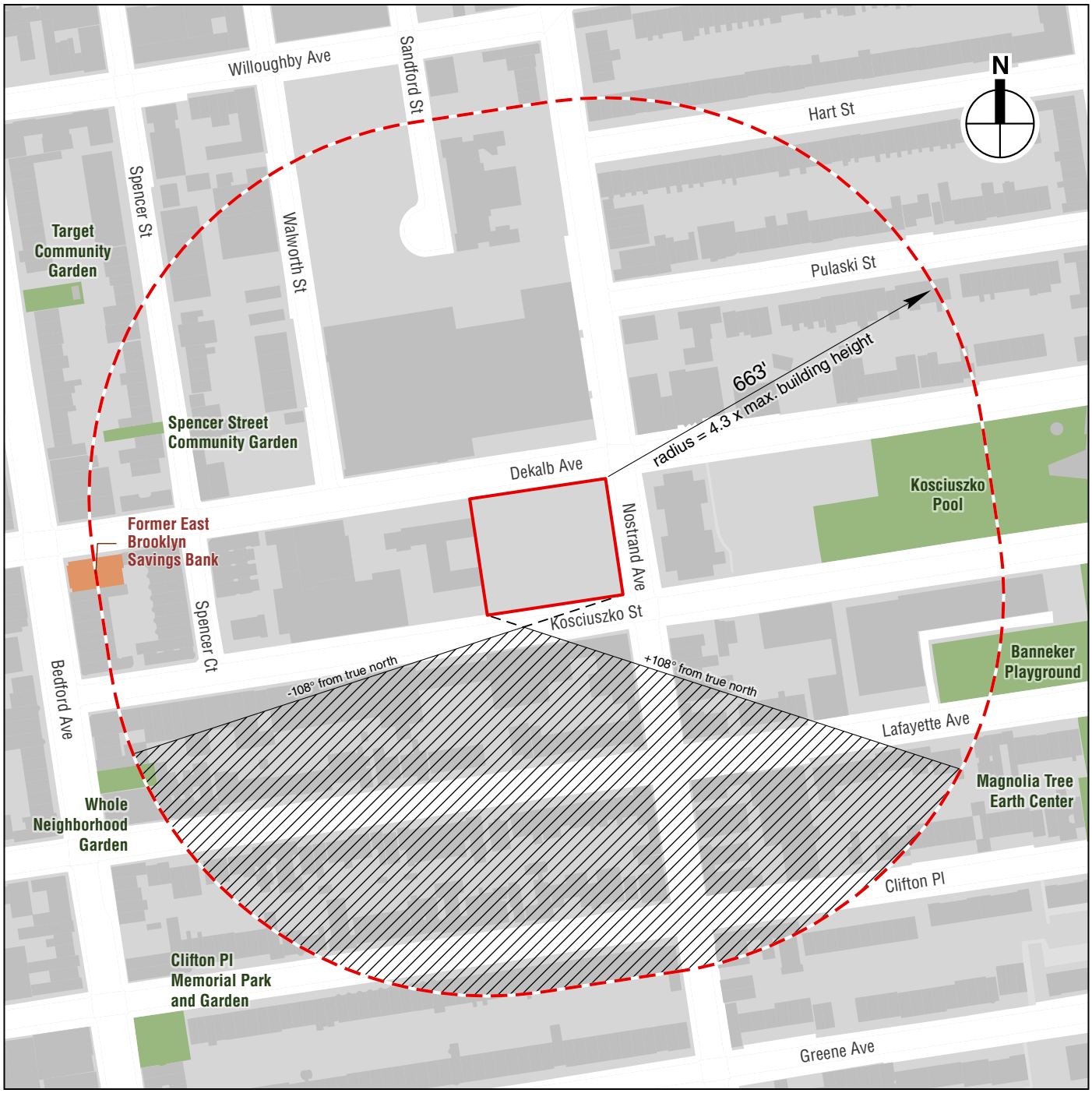
If the second tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a third tier of screening analysis further refines the area that could be reached by project shadow by looking at specific representative days in each season and determining the maximum extent of shadow over the course of each representative day.

If the third tier of analysis does not eliminate the possibility of new shadows on sunlight-sensitive resources, a detailed shadow analysis is required to determine the extent and duration of the incremental shadow resulting from the project. The detailed analysis provides the data needed to assess the shadow impacts. The effects of the new shadows on the sunlight-sensitive resources are described, and their degree of significance is considered. The results of the analysis and assessment are documented with graphics, a table of incremental shadow durations, and narrative text.

C. PRELIMINARY SCREENING ASSESSMENT

A base map was developed using Geographic Information Systems (GIS)[1] showing the location of the proposed project and the surrounding street layout (see **Figure D-1**). In coordination with the open space and historic and cultural resources assessments presented in other chapters of this EAS, potential sunlight-sensitive resources were identified and shown on the map.

[1] Software: Esri ArcGIS Pro; Data: New York City Department of Information Technology and Telecommunications (DoITT) and other City agencies, and AKRF site visits.



Tier 1 and Tier 2 Assessments

270 NOSTRAND AVENUE

Figure D-1

TIER 1 SCREENING ASSESSMENT

For the Tier 1 assessment, the longest shadow that the proposed building could cast is calculated, and, using this length as the radius, a perimeter is drawn around the project site. Anything outside this perimeter representing the longest possible shadow could never be affected by project generated shadow, while anything inside the perimeter needs additional assessment.

According to the *CEQR Technical Manual*, the longest shadow that a structure can cast at the latitude of New York City occurs on December 21, the winter solstice, at the start of the analysis day at 8:51 AM, and is equal to 4.3 times the height of the structure.

Therefore, at a maximum height of 154 feet above curb level, including rooftop mechanical structures, the proposed mixed-use building could cast a shadow up to approximately 663 feet in length (154 x 4.3). Using this length as the radius, a perimeter was drawn around the project site (see **Figure D-1**).

The Tier 1 assessment showed that a number of publicly accessible open spaces and historic resources with sun-sensitive features were located in the longest shadow study area. Therefore, the next tier of assessment was required.

TIER 2 SCREENING ASSESSMENT

Because of the path that the sun travels across the sky in the northern hemisphere, no shadow can be cast in a triangular area south of any given project site. In New York City, this area lies between -108 and +108 degrees from true north. **Figure D-1** illustrates this triangular area south of the project site. The complementary area to the north within the longest shadow study area represents the remaining area that could potentially experience new project generated shadow.

Portions of two parks, a community garden, and a historic resource with sunlight-sensitive features were located in the remaining longest shadow study area, and therefore the next tier of assessment was required.

TIER 3 SCREENING ASSESSMENT

The direction and length of shadows vary throughout the course of the day and also differ depending on the season. In order to determine whether project-generated shadow could fall on a sunlight-sensitive resource, three-dimensional computer modeling software[2] is used in the Tier 3 assessment to calculate and display the proposed project's shadows on individual representative days of the year. A computer model was developed containing three-dimensional representations of the elements in the base map used in the preceding assessments, the topographic information of the study area, and a reasonable worst-case three-dimensional representation of the proposed project.

REPRESENTATIVE DAYS FOR ANALYSIS

Following the guidance of the *CEQR Technical Manual*, shadows on the summer solstice (June 21), winter solstice (December 21) and spring and fall equinoxes (March 21 and September 21, which are approximately the same in terms of shadow patterns) are modeled, to represent the range of shadows over the course of the year. An additional representative day during the growing season is also modeled, generally the day halfway between the summer solstice and the equinoxes, i.e., May 6 or August 6, which have approximately the same shadow patterns.

[2] Bentley MicroStation

TIMEFRAME WINDOW OF ANALYSIS

The shadow assessment considers shadows occurring between one and a half hours after sunrise and one and a half hours before sunset. At times earlier or later than this timeframe window of analysis, the sun is down near the horizon and the sun's rays reach the Earth at very tangential angles, diminishing the amount of solar energy and producing shadows that are very long, move fast, and generally blend with shadows from existing structures. Consequently, shadows occurring outside the timeframe window of analysis are not considered significant under CEQR, and their assessment is not required.

TIER 3 SCREENING ASSESSMENT RESULTS

Figure D-2 illustrates the range of shadows that would occur, in the absence of intervening buildings, from the proposed building on the four representative days for analysis. As they move east and clockwise over the landscape, the shadows are shown occurring approximately every 60 minutes from the start of the analysis day (90 minutes after sunrise) to the end of the analysis day (90 minutes before sunset).

The Tier 3 assessment showed that project-generated shadow could potentially reach a small area at the western end of the Kosciuszko Pool in the late afternoon of the March 21/September 21 and May 6/August 6 analysis days.

The Kosciuszko Pool is closed on both March 21 and September 21. Therefore any new shadow on those days would not affect the use of the pools. However, a detailed analysis is warranted for the May 6/August 6 analysis day.

The Tier 3 assessment found that no sunlight-sensitive resources identified in the Tier 1 and Tier 2 assessment, other than Kosciuszko Pool, could be reached by project-generated shadow on any of the representative analysis days.

D. DETAILED SHADOW ANALYSIS

The purpose of the detailed analysis is to determine the extent and duration of new incremental shadows that fall on sunlight-sensitive resources as a result of the project, and to assess their potential effects. The baseline or future No Action condition is established, containing existing buildings and any future developments planned in the area, to illustrate the baseline shadows. The future condition with the proposed project and its shadows can then be compared to the baseline condition to determine the incremental shadows that would result with the proposed project.

Following the analysis framework described in Attachment A, "Project Description and Screening Analyses," the shadows assessment was performed for the analysis year of 2023, comparing the Proposed Development to the future No Action Development. In the future, absent the Proposed Actions, it is assumed that the Applicant would develop an as-of-right residential and community facility building on the Development Site consistent with the site's existing R7A zoning district. The No Action Development would be nine stories (95 feet) tall plus rooftop mechanical structures.

Three-dimensional representations of the existing buildings in the study area were developed using data obtained from the New York City Department of Information Technology (NYC DoITT), building plans on file with the City, and photos taken during project site visits, and were added to the three-dimensional model used in the Tier 3 assessment. Future planned developments in the study area, as described in Attachment B, "Land Use, Zoning, and Public Policy," were modeled using best available information regarding height and configuration and added to the model. One of these future planned developments is a City-sponsored affordable housing project known as

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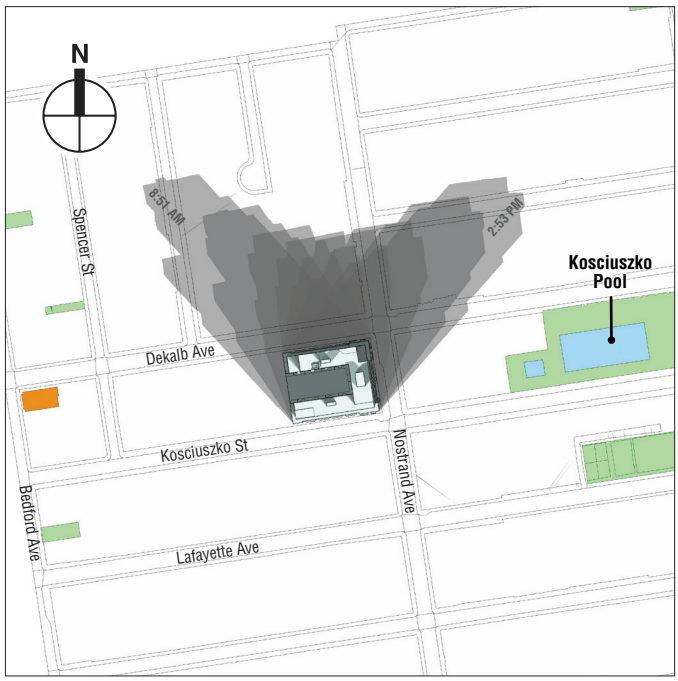
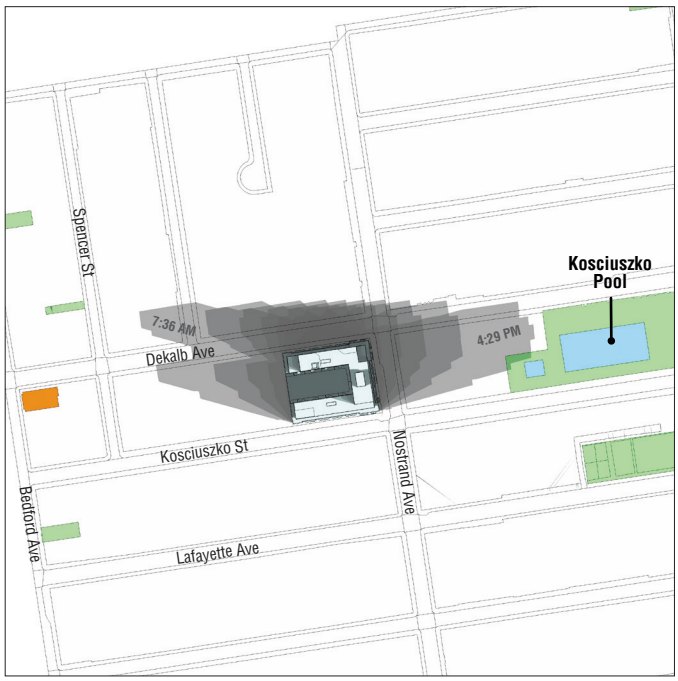
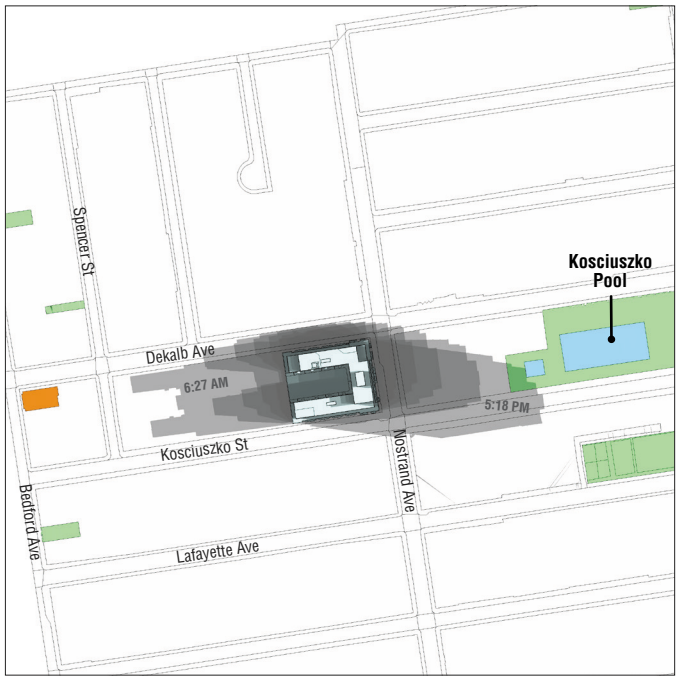


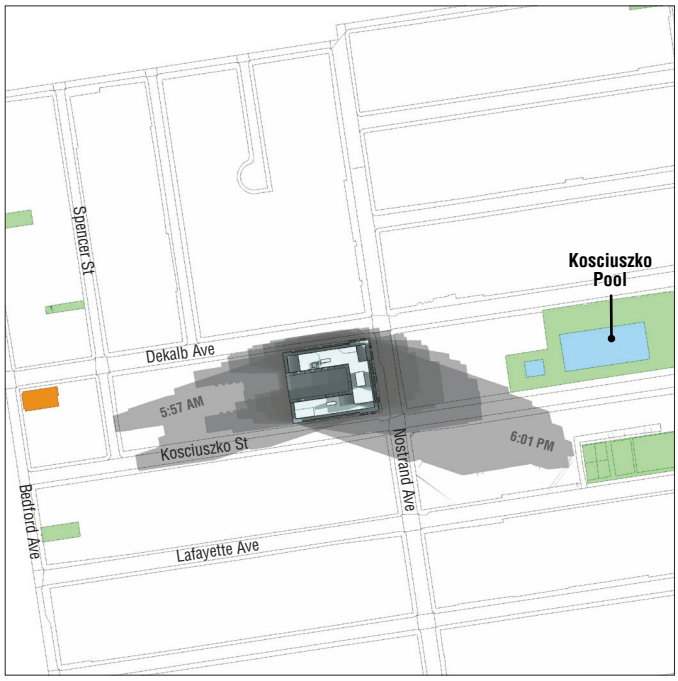
December 21



March 21/September 21



May 6/August 6



June 21

Proposed Project

Publicly Accessible Open Space

Historic Resources with Sunlight-Sensitive Features

Note: see Figure D-1 for all resource names.

This figure illustrates the range of shadows that would occur, absent intervening structures, from the proposed building on each of the four representative analysis days. The shadows are shown occurring approximately every 60 minutes from the start of the analysis day (one and a half hours after sunrise) to the end of the analysis day (one and a half hours before sunset). The Tier 3 assessment does not account for future No Action shadows, and the shadows shown in this figure do not represent incremental shadows. The Tier 3 assessment serves to illustrate the daily path or "sweep" of the proposed building's shadows across the landscape, indicating which resources could potentially be affected on that analysis day, absent intervening buildings, by project-generated shadow. Daylight Saving Time was not used, per *CEQR Technical Manual* guidelines.

Tier 3 Assessment

DeKalb Commons, currently undergoing an environmental review led by the New York City Department of Housing Preservation and Development (CEQR No. 18HPD078K). This project involves three scattered development sites, two of which are located approximately half a block to the east of the Proposed Development at 633-639 Dekalb Avenue and 648-654 Dekalb Avenue, adjacent to the Kosciuszko Pool (see **Figure D-3**). The maximum heights for these two development sites have not been finalized as of this writing, but the locations of the development sites were added to **Figure D-3** for informational purposes. In order to ensure a conservative assessment, shadows generated by these two proposed buildings were not modeled as part of the baseline.

Shadows are in constant movement. The computer simulation software produces an animation showing the movement of shadows over the course of each analysis period. The analysis determines the time when incremental shadow would enter each resource, and the time it would exit.

Shadow analyses were performed for each of the representative days and analysis periods indicated in the Tier 3 assessment.

Table D-1 summarizes the entry and exit times and total duration of incremental shadows on each affected sun-sensitive resource. **Figure D-3** documents the results of the analysis by providing graphic representations from the computer animation of times when incremental shadow would fall on a sun-sensitive resource. The figure illustrates the extent of additional incremental shadow at that moment in time, highlighted in red, and also show existing shadow and remaining areas of sunlight.

Table D-1
Incremental Shadow Durations

Analysis day and timeframe window	December 21 8:51 AM–2:53 PM	March 21/Sept. 21 7:36 AM–4:29 PM	May 6/August 6 6:27 AM–5:18 PM	June 21 5:57 AM–6:01 PM
OPEN SPACES				
Kosciuszko Pool	*	*	5:17 PM–5:18 PM Total: 1 min	—

Notes:
Table indicates entry and exit times and total duration of incremental shadow for each sunlight-sensitive resource. Asterisk (*) indicates resource is closed to the public on those representative days.
Daylight saving time is not used—times are Eastern Standard Time, per *CEQR Technical Manual* guidelines. However, as Eastern Daylight Time is in effect for the March/September, May/August, and June analysis periods, add one hour to the given times to determine the actual clock time.

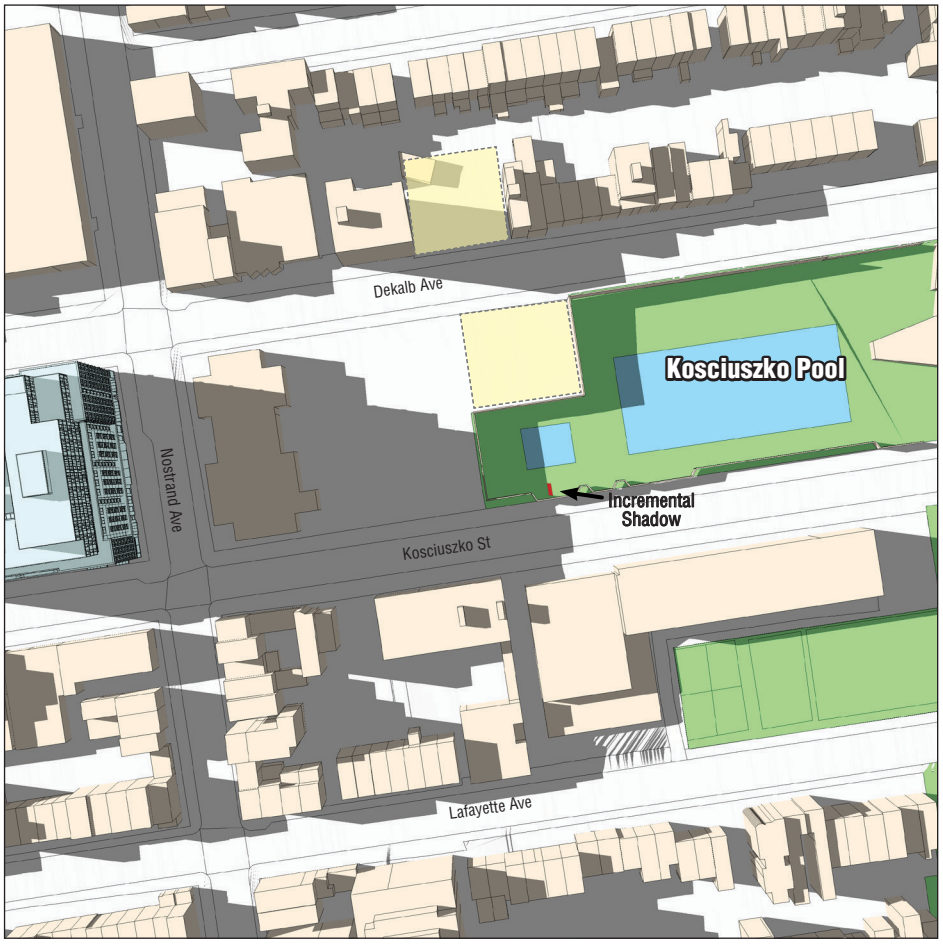
ASSESSMENT OF SHADOW EFFECTS BY RESOURCE

KOSCIUSZKO POOL

Kosciuszko Pool is a public pool that is 2.39 acres in size, the majority of which is dedicated to active swimming uses (approximately 90 percent). The pool is in good condition and is highly utilized when open for the season. Kosciuszko Pool features include an Olympic-sized swimming pool, a wading pool, a mushroom water feature, locker rooms, and grand stands. A wall lines the western side of the space (between the proposed project and the space) and much of the north and sides as well. The height of the wall varies; it is approximately 20 feet on the western side, approximately 12 feet for much of the southern side, and on the northern side ranges from approximately 24 feet to zero near the eastern end of the space. Kosciuszko Pool is closed on the winter analysis day and the March 21/September 21 analysis days.

Incremental shadow would fall beyond the pool's western wall onto a very small portion of the concrete deck near the wading pool at the western end of this large open space for the final minute

12.10.20



5:18 PM

Proposed Project

Publicly Accessible Open Space

Incremental Shadow on Sunlight-Sensitive Resource

Proposed DeKalb Commons Development Sites

NOTES: Only the areas of shadow highlighted in red represent incremental shadow resulting from the proposed project. All other shadow is future No Action shadow, i.e. baseline shadow from existing and future No Action buildings. Daylight Saving Time not used, per *CEQR Techincal Manual* guidelines

May 6 / August 6

270 NOSTRAND AVENUE

Figure D-3

of the May 6/August 6 analysis day (see **Figure D-3**). During the one-minute duration of incremental shadow, the rest of the open space would be in sun. This brief duration and limited extent of incremental shadow at the end of the analysis day would not significantly impact the use of this open space.

No incremental shadow would reach the open space on June 21.

E. CONCLUSIONS

The Proposed Development would cast new shadow on a small area at the western end of Kosciuszko Pool for the last minute of the May 6/August 6 analysis day. Only a very small portion of the concrete deck near the wading pool would be affected. The rest of the wading pool, the larger pool, and remaining areas of this open space would be in sun during this one-minute duration. No incremental shadow would fall on Kosciuszko Pool on June 21, and the pool is closed on the winter and March 21/September 21 analysis days. According to the CEQR Technical Manual, incremental shadow durations of 10 minutes or less are generally not considered significant. Consequently, given all these factors, shadows from the Proposed Development would not significantly impact the use of the pool. ✷

A. INTRODUCTION

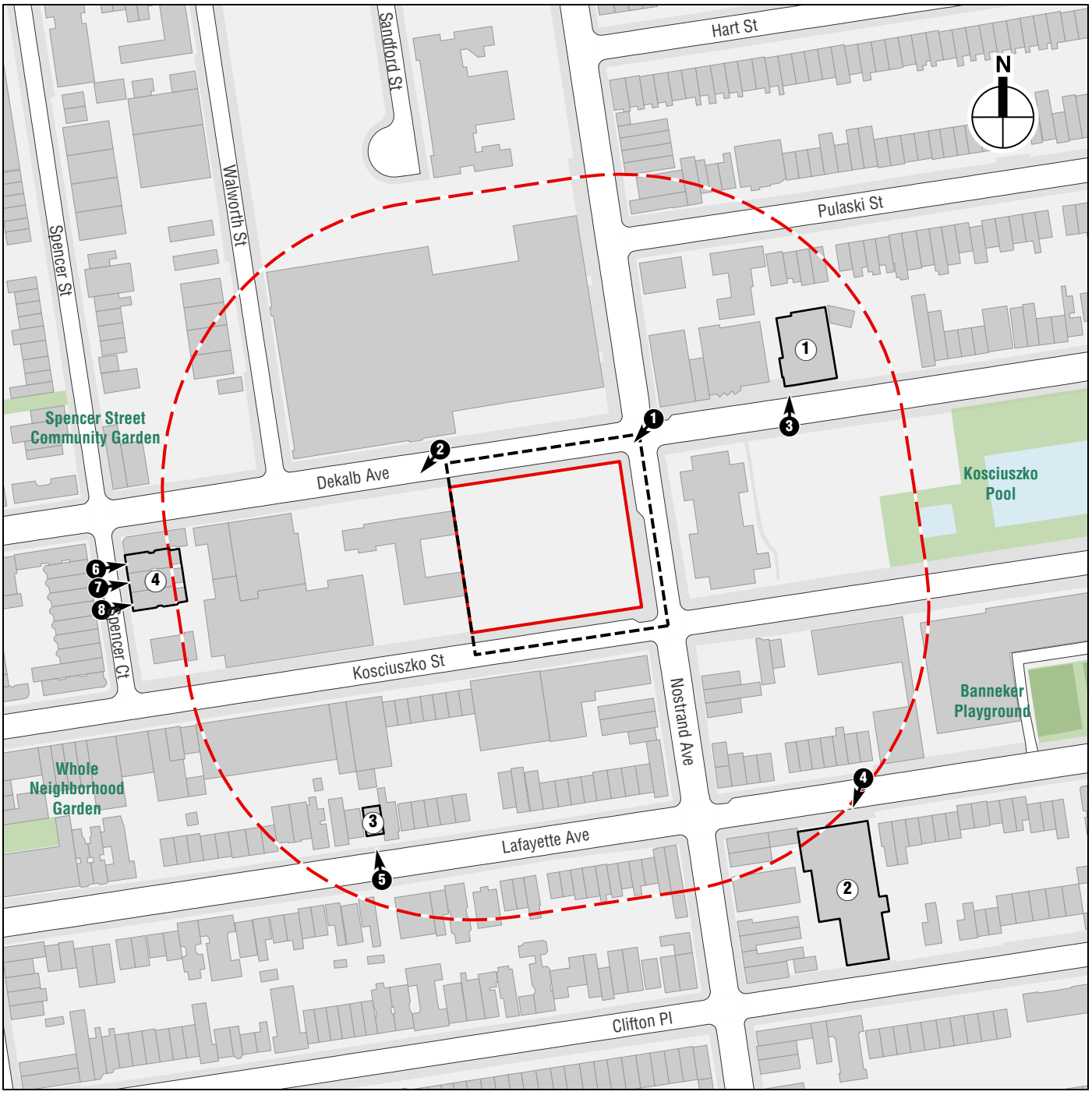
This attachment assesses the potential of the Proposed Actions to affect historic and cultural resources, which include both archaeological and architectural resources. The area directly affected by the Proposed Actions consists of the Development Site (Block 1778, Lot 55) and an approximately two-foot wide portion of the adjacent lot to the west (Block 1778, Lot 49), herein referred to as the "Project Area" or "Rezoning Area." The Proposed Actions would result in the development of an approximately 444,289 gross square foot (gsf) mixed-use building on the Development Site containing residential, commercial, and community facility uses with at-grade and underground parking (the "Proposed Development"). The Development Site is located at 270 Nostrand Avenue in the Bedford Stuyvesant neighborhood of Brooklyn, Community District 3. The Development Site is currently vacant. This assessment finds that the Proposed Actions would not result in significant adverse impacts to historic and cultural resources.

B. METHODOLOGY

The study area for archaeological resources consists of the Development Site, where disturbance from excavation and construction of the Proposed Development is anticipated. In a letter dated November 4, 2019, the New York City Landmarks Preservation Commission (LPC) determined that the Development Site does not possess archaeological sensitivity (see **Appendix A**). Therefore, this analysis focuses on standing structures only.

Study areas for architectural resources are determined based on the area of potential effect for construction period impacts, as well as the larger area in which there may be visual or contextual impacts. Consistent with the guidelines of the 2014 *City Environmental Quality Review (CEQR) Technical Manual,* the study area for architectural resources has been defined as the area within 400 feet of the Development Site (see **Figure E-1**). Officially recognized historic resources ("known resources") include resources listed on the State and National Registers of Historic Places (S/NR) or determined eligible for such listing (S/NR-eligible) or contained within a historic district listed on or determined eligible for listing on the Registers; New York City Landmarks (NYCLs), New York City Historic Districts (NYCHDs) and properties pending such designation. Any known architectural resources within the study area were mapped and are identified below. Additionally, a survey was conducted of the study area, to identify any previously undesignated properties that appear to meet S/NR or NYCL eligibility criteria ("potential architectural resources").

Impacts on architectural resources can include both direct and indirect impacts. Direct (physical) impacts include damage from vibration (i.e., from construction blasting or pile driving) and additional damage from adjacent construction that could occur from falling objects, subsidence, collapse, or damage from construction machinery. Adjacent construction is defined as any construction activity



Architectural Resources

270 NOSTRAND AVENUE

Figure E-1

that would occur within 90 feet of an architectural resource, as defined in the New York City Department of Buildings (DOB) *Technical Policy and Procedure Notice* (TPPN) #10/88.[1]

Indirect impacts on architectural resources are contextual or visual impacts that could result from project construction or operation. As described in the *CEQR Technical Manual*, indirect impacts could result from blocking significant public views of a resource; isolating a resource from its setting or relationship to the streetscape; altering the setting of a resource; introducing incompatible visual, audible, or atmospheric elements to a resource's setting; or introducing shadows over a historic landscape or an architectural resource with sun-sensitive features that contribute to that resource's significance (e.g., a church with stained-glass windows).

C. EXISTING CONDITIONS

ARCHITECTURAL RESOURCES

DEVELOPMENT SITE

The Development Site is currently vacant and does not contain any structures. There are no known or potential architectural resources on the Development Site (see Photo 1 of **Figure E-2**).

REMAINDER OF PROJECT AREA (PART OF LOT 49)

The CABS Senior Housing was built in 1984, and as such, is not eligible for listing on the S/NR as it does not meet the minimum S/NR 50-year age criterion. While the building does meet the minimum age criterion for NYCL designation (30 years), the seven-story brick building is of utilitarian design and is not architecturally or historically significant. Therefore, there are no known or potential architectural resources in the remainder of the Project Area (see Photo 2 of **Figure E-2**).

STUDY AREA

There are no known architectural resources located in the 400-foot study area. Six individual potential architectural resources have been identified in the study area, three of which have been grouped together for the analysis. These resources are mapped on **Figure E-1** and described below.

625 Dekalb Avenue

The property at 625 Dekalb Avenue includes the Marcy Branch of the Brooklyn Public Library, built circa 1968 (see Photo 3 of **Figure E-3**). The property is located approximately 163 feet from the Development Site. The one-story, white brick-clad building was designed by the New York City Public Works Department in a Mid-Century Modern style. Built to replace the Tompkins Park Reading Center, which originally opened in 1899, the Marcy Branch building was constructed to include air conditioning, units for adults, teens, and children, as well as hold over 30,000 books.[2] The building features an asymmetrical profile with three angled wall sections that support multi-paned, floor-to-ceiling windows that face southwest towards the intersection of Dekalb and Nostrand Avenues. The main entrance to the building is located directly east of the angled wall section, with a double door entrance and single pane transom windows. The entrance

[1] TPPN #10/88 was issued by DOB on June 6, 1988, to supplement Building Code regulations with regard to historic structures. TPPN #10/88 outlines procedures for the avoidance of damage to historic structures that are listed on the NR or NYCLs resulting from adjacent construction, defined as construction within a lateral distance of 90 feet from the historic resource.

[2] "Public Library Soon Will Add to Boro Space." *Daily News.* New York, New York. March 12, 1967: 975.



View southwest of the vacant Development Site **1**



View southwest of the CABS Senior Housing building at 590 Dekalb Avenue **2**

Development Site and Remainder of Project Area (Part of Lot 49)



View north of the Brooklyn Public Library Marcy Branch at 625 Dekalb Avenue **3**



View south of the
Brooklyn Tabernacle Deliverance Center
at 600 Lafayette **4**

Potential Architectural Resources
in the Study Area

sits below a metal portico. Further east, the façade includes another series of windows that run continuously in a horizontal line along the main façade. Above the window is metal lettering that reads "Brooklyn Public Library." The building is topped with a metal parapet.

600 Lafayette Avenue

The four-story building at 600 Lafayette Avenue is currently owned by the Brooklyn Tabernacle Prayer for All People (see Photo 4 of **Figure E-3**). The building is located approximately 384 feet from the Development Site. Built in 1929 for the Brooklyn College of Pharmacy of Long Island University, the building included laboratories, classrooms, and a top-floor gymnasium.[3] The brick-clad building was designed in the Collegiate Gothic style and features limestone detailing along its main (north) facade and a raised basement faced in stone (currently painted). Brick pilasters that run from the foundation to above the fourth floor windows separate the building into five bays. The main entrance, which faces Lafayette Avenue, is recessed and surmounted by a low foliated Tudor arch made of stone. Foliated Tudor arches can be found above the windows on the fourth floor as well. A centrally located stone medallion depicting the scales of justice is located at the parapet. The windows and main entrance door are not original to the building's construction. In 1979, the Brooklyn College of Pharmacy moved to a new building on the Long Island University Brooklyn campus located in Downtown Brooklyn. The building sat vacant until 1981, when the Brooklyn Tabernacle Deliverance Center purchased the property.

539 Lafayette Avenue

The residential building at 539 Lafayette Avenue was built circa 1870 (see Photo 5 of **Figure E-4**). The property is located approximately 235 feet from the Development Site. Built in the Italianate style, the residential building is two stories in height with a brick-clad basement. Wood stable doors are located on the eastern edge of the main façade at the basement level. Three-bays wide, the building has a high stoop with cast-iron handrails and a cast-iron fence enclosing the paved front yard. The main entrance is recessed underneath a protruding door hood supported by brackets; there is a secondary entrance underneath the stoop. The entrance has round-headed, wooden double doors. The windows are framed with projecting lintels supported by brackets above. A set of paired windows is located on the first floor in the central bay. The building has a projecting cornice, embellished with moldings and supported by rectangular-shaped brackets.

1-5 Spencer Court

The three apartment buildings at 1, 3, and 5 Spencer Court are located approximately 380 feet from the Development Site, at the western end of the project block (see Photos 6–8 of **Figure E-4** and **Figure E-5**). Built between 1886 and 1896 in the Romanesque Revival style, the four-story buildings are faced with rock-faced and smooth brownstone or limestone. With frontage along Spencer Court, the buildings have symmetrical facades with rock-faced stone arches and smoothed stone lintels over windows in a slightly different configuration on each building. The first floors of the buildings are above grade, with a raised basement visible beneath. Both 3 and 5 Spencer Court still have their original multi-paneled wood double doors. The original entrance on 1 Spencer Court has been replaced with a modern steel and glass door. The buildings are finished with pressed metal cornices. Each building has non-original cast iron fire escapes.

[3] LIU Pharmacy. "LIU Pharmacy History." Long Island University Pharmacy. Accessed October 23, 2019. Available: https://liu.edu/Pharmacy/Spotlight-On/Pharmacy-History

10.25.19



View north of the residence at 539 Lafayette Avenue **5**



View east of the apartment building at 1 Spencer Court **6**

Potential Architectural Resources in the Study Area

270 NOSTRAND AVENUE

Figure E-4

10.25.19



View east of the apartment building at 3 Spencer Court **7**



View east of the apartment building at 5 Spencer Court **8**

Potential Architectural Resources in the Study Area

270 NOSTRAND AVENUE

Figure E-5

D. THE FUTURE WITHOUT THE PROPOSED ACTIONS

DEVELOPMENT SITE AND REMAINDER OF PROJECT AREA (PART OF LOT 49)

In the future without the Proposed Actions, the Development Site would be developed under existing zoning (the "No Action Development"). The No Action Development would total 274,525 gross square feet (gsf), including 249,465 gsf of residential space (approximately 305 dwelling units [DUs]), and 25,060 gsf of community facility space. The development could include 61 affordable units (20 percent) and 244 market rate units (80 percent) in accordance with the Voluntary Inclusionary Housing Program, in which case parking 122 spaces would be required. The new development would be approximately 95 feet (nine stories) in height. In the future without the Proposed Actions, the existing conditions on Lot 49 are expected to remain.

STUDY AREA

Current land use and development trends are expected to continue in the future without the Proposed Actions. As described in Attachment B, "Land Use, Zoning, and Public Policy," ten background development projects are currently anticipated to be completed by 2023. These include four four- to eight-unit residential buildings located southwest of the Development Site at 551 and 553 Lafayette Avenue (two adjacent sites), 548 Lafayette Avenue, and 563A Lafayette Avenue.[4] East of the Development Site, two of the projects (633-639 Dekalb Avenue and 648-654 Dekalb Avenue) will include 37 and 45 DUs. Three projects (249, 251, and 253 Nostrand Avenue) to the southeast of the Development Site fronting Nostrand Avenue will include 14 DUs, 2,220 gsf of local retail uses, and 1,477 gsf of community facility uses. At 243 Nostrand Avenue, southeast of the Development Site, the building is being altered to include 2 DUs as well as reopen 1,764 gsf of local retail uses.

With the exception of the building at 539 Lafayette Avenue, the potential architectural resources in the study area are located more than 90 feet from these development projects, beyond the distance where they could be expected to potentially experience inadvertent construction-related damage. The development project at 548 Lafayette Street is located within 90 feet of the potential architectural resource at 539 Lafayette Avenue; however, while the 548 Lafayette Avenue building does not have its Certificate of Occupancy (CO), its construction appears to be complete, and thus it is not anticipated that the project would involve any additional construction tasks at this time that could inadvertently result in damage to 539 Lafayette Avenue. The development projects will in some cases replace vacant parcels, and will not alter views to or the setting of the potential architectural resources.

Historic resources that are listed on the S/NR or that have been found eligible for listing are given a measure of protection under Section 106 of the National Historic Preservation Act from the effects of projects sponsored, assisted, or approved by federal agencies. Although preservation is not mandated, federal agencies must attempt to avoid adverse effects on such resources through a notice, review, and consultation process. Properties listed on the Registers are similarly protected against effects resulting from projects sponsored, assisted, or approved by state agencies under the New York State Historic Preservation Act of 1980. However, private owners of properties eligible for or listed on the Registers using private funds can alter or demolish their properties without

[4] The residential building at 548 Lafayette Avenue appeared to be complete during field surveys, but has yet to obtain a Certificate of Occupancy (CO) signifying the completion of the building and is thus conservatively included as a background development project.

such a review process. Privately owned properties that are NYCLs, in NYCHDs, or pending designation as NYCLs are protected under the New York City Landmarks Law, which requires LPC review and approval before any alteration or demolition permits can be issued, regardless of whether the project is publicly or privately funded. Publicly owned resources are also subject to review by LPC before the start of a project. However, LPC's role in projects sponsored by other City or state agencies generally is advisory only.

The New York City Building Code provides some measures of protection for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. While these regulations serve to protect all structures adjacent to construction areas, they do not afford special consideration for historic structures.

E. THE FUTURE WITH THE PROPOSED ACTIONS

DEVELOPMENT SITE AND REMAINDER OF PROJECT AREA (PART OF LOT 49)

In the future with the Proposed Actions (the With Action Development), the Development Site would be redeveloped with an approximately 444,289 gsf mixed-use building that would include: approximately 487 DUs; approximately 22,285 gsf of local retail space on the cellar and ground floor levels; approximately 1,128 gsf of community facility space (assumed as a medical office use); and 176 accessory parking spaces. The new building would be 14 stories (approximately 145 feet tall), compared to 9 stories (approximately 95 feet tall) in the No Action Development. The building would be predominately clad in glass, with sections of the building clad in red and dark brown brick. Compared to the No Action Development, the cellar and ground floors of the Proposed Development would be primarily in retail use instead of community facility use, additional residential units would be developed, and additional parking would be required. In the future with and without the Proposed Actions, no changes are expected to occur on Lot 49. As described above, there are no known or potential architectural resources on the Development Site or the remainder of the Project Area. Therefore, the Proposed Development would not result in any significant adverse impacts on such resources.

STUDY AREA

DIRECT IMPACTS

The potential architectural resources located in the study area are located more than 90 feet from the Development Site, beyond the distance where they could be expected to potentially experience inadvertent construction-related damage. Using the *CEQR Technical Manual* direct impact criteria noted above, the Proposed Development would not result in the replication of aspects of any of any resource so as to cause a false historical appearance, or the introduction of significant new shadows or significant lengthening of the duration of existing shadows over historic landscapes or structures (see Attachment D, "Shadows"). Therefore, the Proposed Development would have no direct impacts on architectural resources in the study area.

INDIRECT IMPACTS

Using the *CEQR Technical Manual* criteria for indirect, contextual impacts noted above, the Proposed Development would not eliminate or screen views to the potential architectural resources in the study area, or result in the isolation of the resources from, or alteration of, their settings or visual relationships with the streetscape. The Proposed Development would also not adversely alter the visual prominence of the potential architectural resources.

As described above, the potential architectural resources are all located over 160 feet from the Development Site. Views to the potential architectural resources would not change because of the new Proposed Development. The resources are generally small in scale, and views to them are limited to directly adjacent streets. The Brooklyn Public Library Marcy Branch at 625 Dekalb Avenue is on a block occupied by older altered residential and mixed-use properties, and a few new four- to seven-story residential buildings. Similarly, the building at 600 Lafayette Avenue is on a block occupied predominately by older altered properties and the Hattie Carthan Community Garden. The potential architectural resource at 539 Lafayette Street is surrounded by new construction as well as older residences, many of which have been altered. North of the resource are low-scale industrial buildings and more older residences that have been altered over time. The residential buildings at 1, 3, and 5 Spencer Court are located on the same block as the Development Site and the remainder of the project area. This block also includes former, large-scale factories that have been converted into mixed-use properties, in addition, to a newer 12-story residential building.

Under the With Action condition, the proposed maximum 154-foot-tall complex (including rooftop mechanical equipment) would be taller than the existing buildings in the study area, which typically range from one to four stories. However, due to the distance of the Proposed Development from the potential architectural resources and existing, interfering development, the greater height of the building would not adversely affect the setting of the potential architectural resources. As described in Attachment D, "Shadows," project-generated shadows would not reach any sunlight-sensitive architectural resources. In addition, the potential architectural resources exist in setting where the majority of older buildings have been significantly altered or replaced with more contemporary development. Therefore, the Proposed Development would not introduce visual, audible, or atmospheric elements that would be incompatible with the setting of the potential architectural resources.

Overall, the Proposed Development would have no significant adverse impacts on historic and cultural resources. ✷

A. INTRODUCTION

This attachment considers the potential for the Proposed Actions to affect urban design and visual resources. As described in Attachment A, "Project Description and Screening Analyses," the Proposed Actions would facilitate the development of an approximately 444,289 gross square foot (gsf) mixed-use building containing residential, commercial, and community facility uses (the "Proposed Development") at 270 Nostrand Avenue (the "Development Site") in the Bedford Stuyvesant neighborhood of Brooklyn. The area directly affected by the Proposed Actions consists of the Development Site (Block 1778, Lot 55) along with an approximately 1.83-foot wide portion of the adjacent lot to the west (Block 1778, Lot 49), herein referred to as the "Project Area" or "Rezoning Area."

Under the 2014 *City Environmental Quality Review (CEQR) Technical Manual*, urban design is defined as the totality of components that may affect a pedestrian's experience of public space. These components include streets, buildings, visual resources, open spaces, natural resources, and wind. An urban design assessment under CEQR must consider whether and how a project may change the experience of a pedestrian. The *CEQR Technical Manual* guidelines recommend the preparation of a preliminary assessment of urban design and visual resources followed by a detailed analysis, if warranted, based on the conclusions of the preliminary assessment. The analysis provided below addresses urban design characteristics and visual resources for existing conditions, the future without the Proposed Actions (the "No Action" condition), and the future with the Proposed Actions (the "With Action" condition).

B. PRELIMINARY ASSESSMENT

Based on the *CEQR Technical Manual*, a preliminary assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe from the street level a physical alteration beyond that allowed by existing zoning. Examples include projects that permit the modification of yard, height, and setback requirements, and projects that result in an increase in built floor area beyond what would be allowed "as-of-right" or in the future without the proposed project.

The Proposed Actions include a zoning map change that would allow for a greater floor area ratio (FAR) within the Project Area. Therefore, as the Proposed Actions could result in physical alterations beyond those allowed by existing zoning, they meet the threshold for a preliminary assessment of urban design and visual resources.

C. METHODOLOGY

According to the *CEQR Technical Manual*, the study area for urban design is the area where the project may influence land use patterns and the built environment, and is generally consistent with that used for the land use analysis. For visual resources, the view corridors within the study area from which such resources are publicly viewable should be identified.

Consistent with the analysis of land use, zoning, and public policy, the study area for the urban design and visual resources analysis has been defined as the area within 400 feet of the Project Area. This study area is generally bounded by Pulaski Street to the north, the midpoint between Marcy and Nostrand Avenues to the east, Lafayette Avenue to the south, and Spencer Court to the west (see **Figures F-1 and F-2**).

The *CEQR Technical Manual* recommends an analysis of pedestrian wind conditions in the urban design and visual resources assessment, for projects that would result in the construction of large buildings at locations that experience high-wind conditions (such as along the waterfront, or other locations where winds from the waterfront are not attenuated by buildings or natural features), which may result in an exacerbation of wind conditions due to "channelization" or "downwash" effects that may affect pedestrian safety. Factors to be considered in determining whether such a study should be conducted include locations that could experience high-wind conditions, such as along the waterfront; size, and orientation of the proposed buildings; the number of proposed buildings to be constructed; and the site plan and surrounding pedestrian context of the proposed project. The Development Site is not on the waterfront or in a location where winds from the waterfront are not attenuated by buildings or natural features. Therefore, an analysis of wind conditions and their effect on pedestrian level safety is not warranted under CEQR.

D. EXISTING CONDITIONS

URBAN DESIGN

Figures F-3 through F-5 illustrate urban design characteristics of the Development Site, Project Area, and study area, including built floor FAR, lot coverage, and building height.

DEVELOPMENT SITE

The Development Site comprises Lot 55 of Block 1778 in the Bedford Stuyvesant neighborhood of Brooklyn. It is located on the west side of Nostrand Avenue between DeKalb Avenue to the north and Kosciuszko Street to the south. The Development Site is approximately 47,634 square feet (sf) in size and is currently vacant and surrounded by green construction fencing (see views 1-3 of **Figures F-6 and F-7**). Two curb cuts are located along the site's Dekalb Avenue frontage, at approximately 75 feet and 200 feet west of Nostrand Avenue. The sidewalks surrounding the Project Site currently lack street trees and street furniture, but a group of mature trees border the eastern edge of the site; there are also individual mature trees along the site's northern and southern edges. The Development Site's Nostrand Avenue frontage is immediately adjacent to a stop for the B44 bus which includes Select Bus Service (SBS).

REMAINDER OF THE PROJECT AREA (PART OF LOT 49)

The remaining portion of the Project Area is an approximately 1.83-foot wide portion of the eastern extent of adjacent Lot 49. Lot 49 is currently occupied by a 7-story, red brick senior housing building (590 DeKalb Avenue) constructed in 1984 (see views 4 and 5 of **Figures F-7 and F-8**). The building on Lot 49 is set back from the lot line on both Dekalb Avenue (approximately 30-foot setback) and Kosciuszko Street (approximately 45-foot setback). On Dekalb Avenue, the setback area is landscaped and has benches adjacent to the building entrance for residents of the building; on Kosciuszko Street, the setback area contains 12 accessory parking spaces, behind a tall metal fence.

12.11.19



Development Site

Study Area (400-foot perimeter)

Rezoning Area

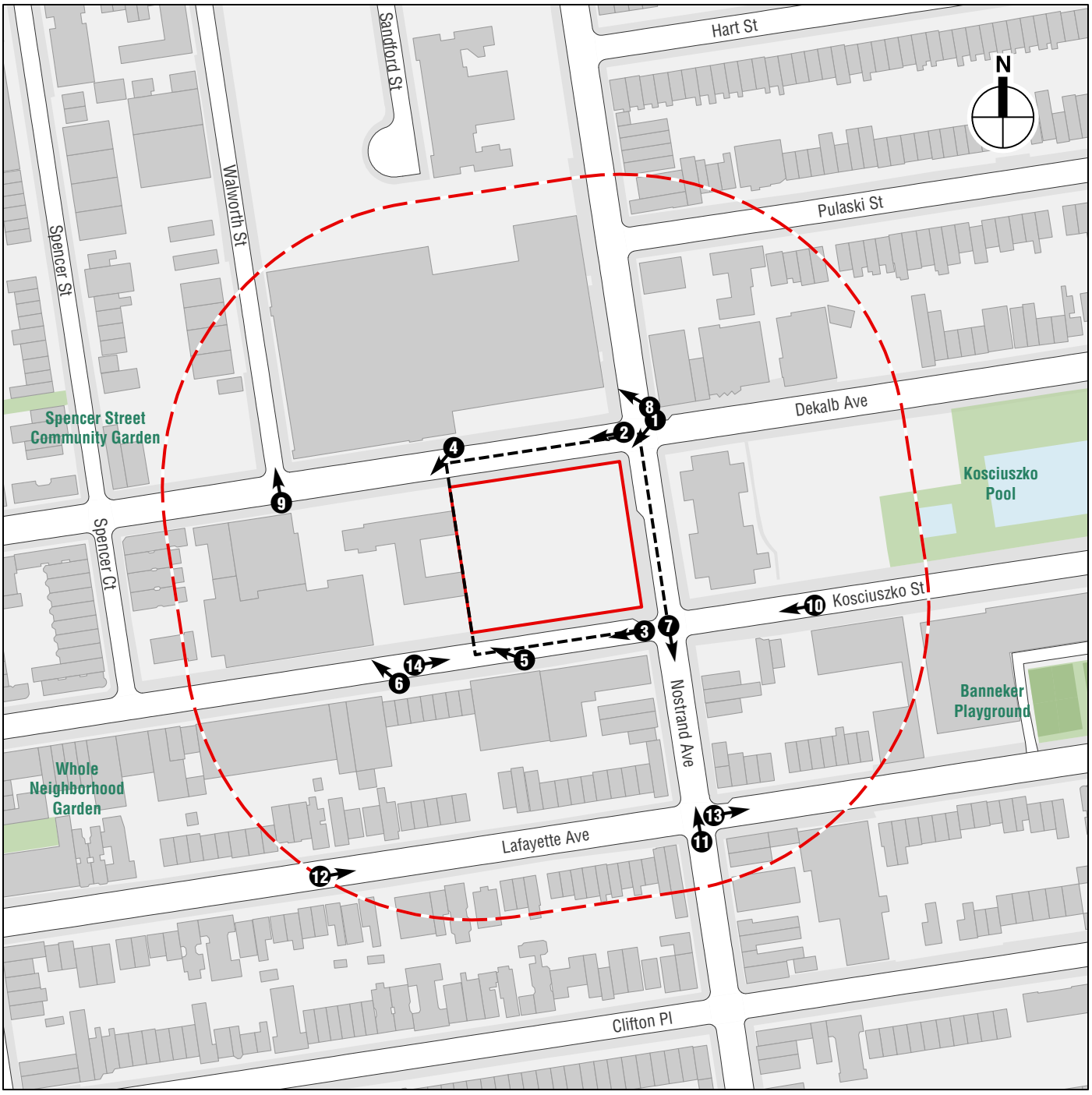
NOTE: The aerial imagery shown in this figure is dated 2018. The building shown on the Development Site has recently been demolished and the site is currently vacant.

Urban Design and Visual Resources
Study Area Aerial

270 NOSTRAND AVENUE

Figure F-1

12.10.19



Development Site

Study Area (400-foot perimeter)

Rezoning Area

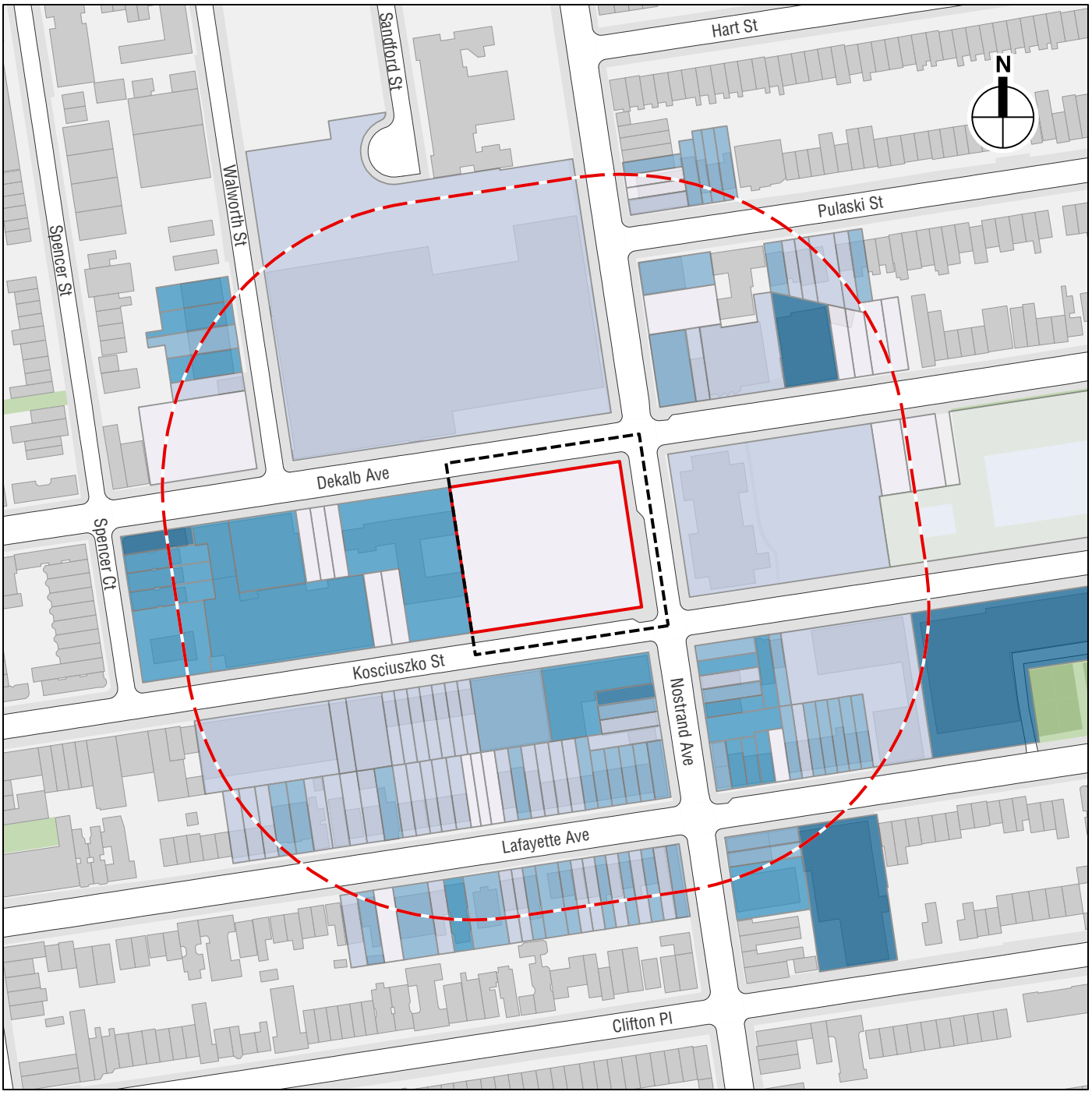
Photograph View Direction and Reference Number

Urban Design and Visual Resources
Photograph Reference Map

270 NOSTRAND AVENUE

Figure F-2

11.6.19



Rezoning Area

Development Site

Study Area (400-foot perimeter)

Built FAR

0 - 0.5

0.5 - 1.5

1.5 - 2.5

2.5 - 3.5

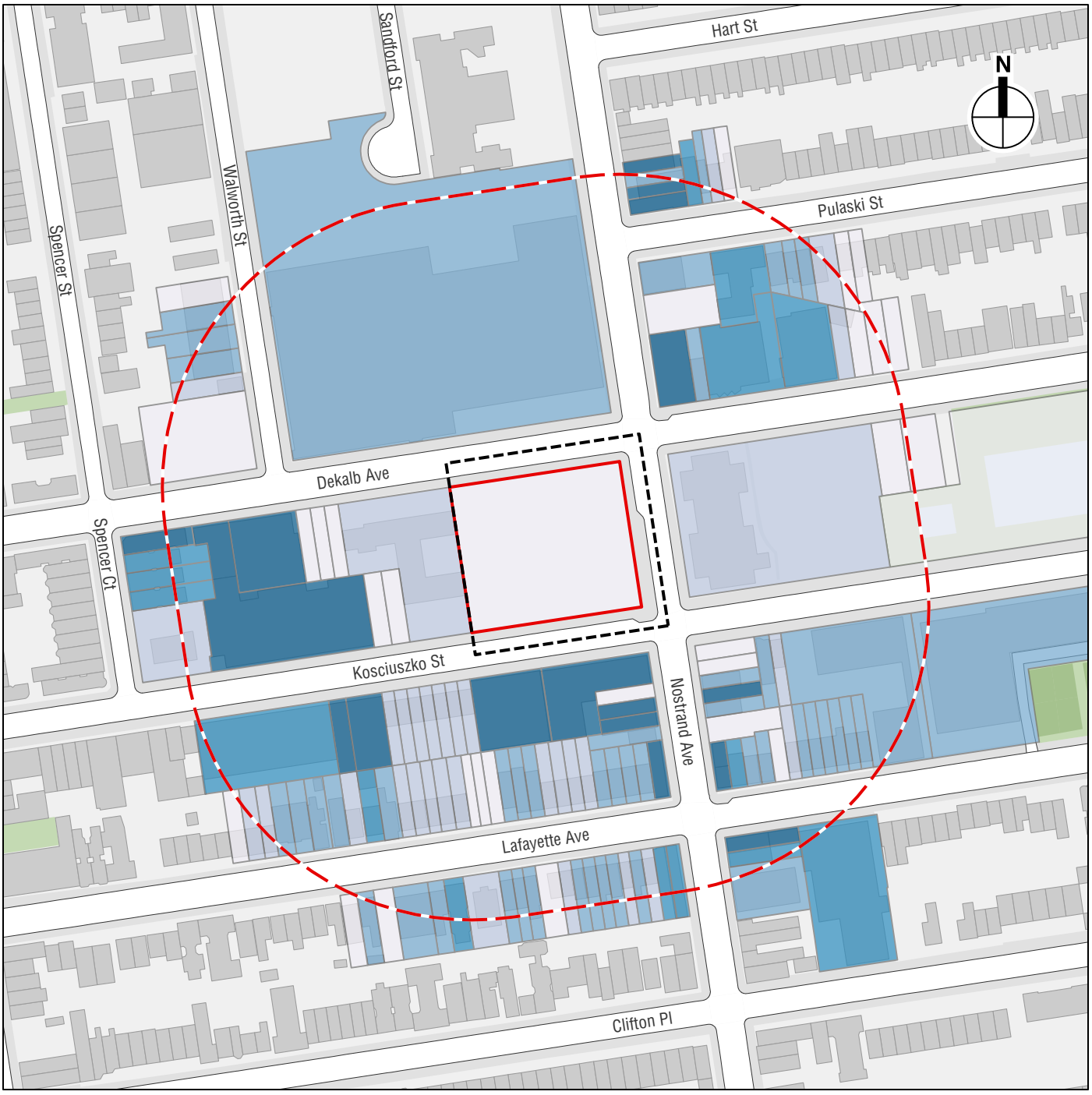
3.5 - 5

270 NOSTRAND AVENUE

Built FAR

Figure F-3

11.6.19



Rezoning Area

Development Site

Study Area (400-foot perimeter)

Lot Coverage (%)

0 - 20

20 - 40

40 - 60

60 - 80

80 - 100

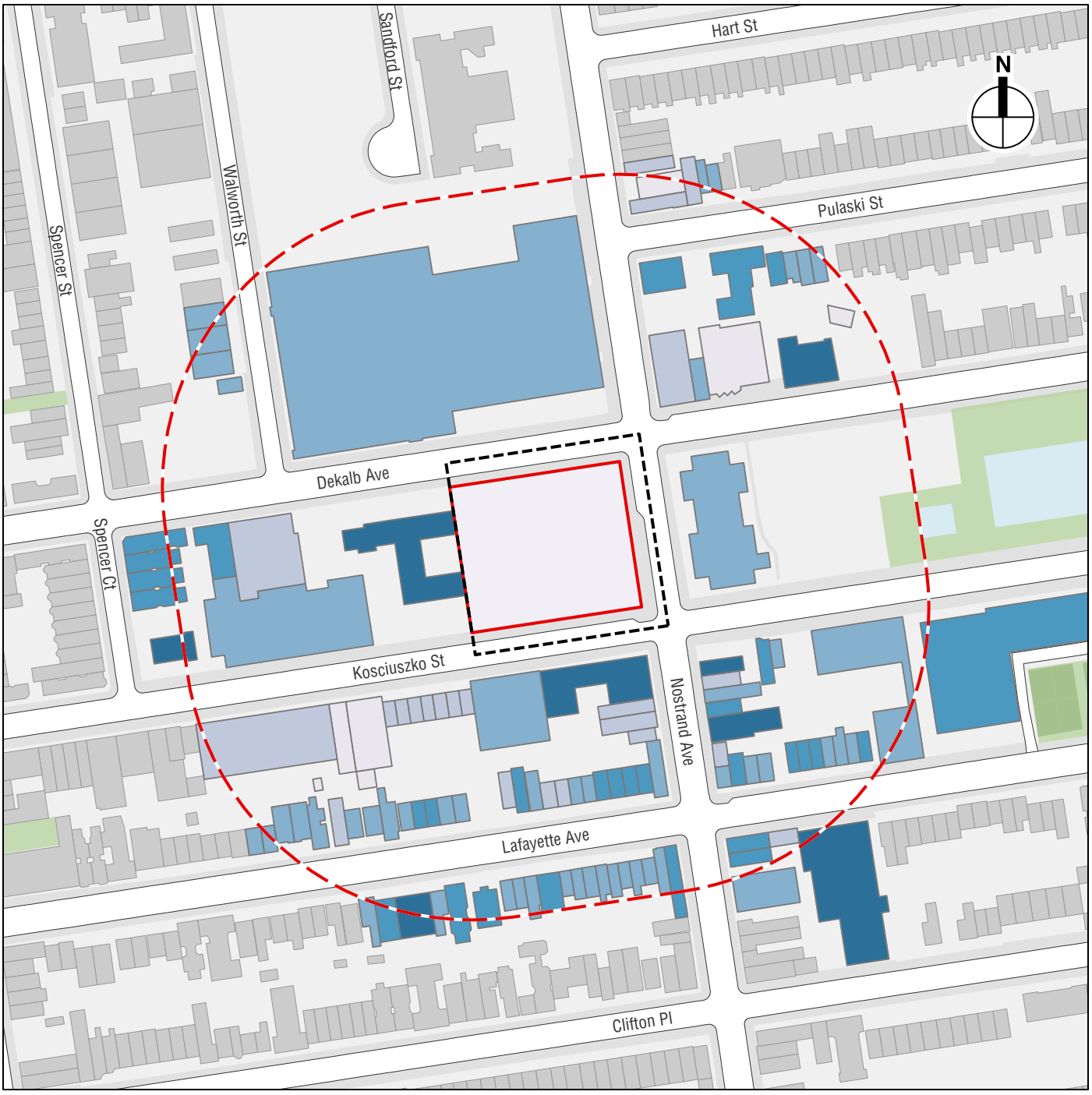
0 200 FEET

Lot Coverage

270 NOSTRAND AVENUE

Figure F-4

12.9.19



Rezoning Area

Development Site

Study Area (400-foot perimeter)

Building Height (feet)

0 - 20

21 - 30

31 - 40

41 - 55

56 - 135

0 200 FEET

Building Heights

270 NOSTRAND AVENUE

Figure F-5



Development Site, view looking southwest from Nostrand Avenue at Dekalb Avenue **1**



Dekalb Avenue, view west from Nostrand Avenue adjacent to Development Site **2**

Photographs of Development Site



Kosciuszko Street, view west from Nostrand Avenue adjacent to Development Site **3**



Building on Lot 49, looking south from Dekalb Avenue **4**

Photographs of Development Site and Project Area

Figure F-7



Building on Lot 49, looking northwest from Kosciuszko Street **5**



Buildings on southwest side of project block, looking northwest from Kosciuszko Street **6**

Photographs of Project Area and Study Area

STUDY AREA

The most prominent streets in the study area are Nostrand and Dekalb Avenues. Nostrand Avenue is a 70-foot-wide roadway that carries one-way traffic southbound and has a dedicated bus lane (identified with red paint and signage); Dekalb Avenue is a 70-foot-wide roadway that includes a conventional bike lane and carries one-way traffic westbound. Kosciuszko Street and Lafayette Avenue are both 70-foot-wide roadways carrying one-way traffic eastbound. The streets north of Dekalb Avenue and west of Nostrand Avenue run north-south and do not extend fully through the study area. The blocks in this portion of the study area are long, rectangular, and oriented in a north-south direction; in the remainder of the study area, blocks are oriented in an east-west direction. The block directly north of the Development Site is a superblock; Sandford Street (50 feet wide) extends south into the middle of the block from Willoughby Avenue (70 feet wide), ending in a cul-de-sac. Pedestrian traffic appears heaviest along Nostrand and Dekalb Avenues. The topography of the study area is relatively flat.

The sidewalks surrounding the Development Site are in good condition along Nostrand Avenue and Kosciuszko Street, and fair condition along Dekalb Avenue. Parallel parking is available on most streets in the study area. Streetscape elements within the study area are minimal, but include cobrahead lampposts, large-scale signage for SBS above Nostrand Avenue, and illuminated, large signage on pylons in the Home Depot parking lot. There is also a tall, solid metal fence with chain link above enclosing the Home Depot surface parking field (described below) on Walworth and Sanford Streets and Willoughby Avenue, which presents a closed-off, uninviting face to surrounding pedestrians. The blacktop play areas surrounding Public School (P.S.) 054, adjacent to the Home Depot building and parking field, also are surrounded with chain link fencing, and the Kosciuszko Pool complex (described below) is surrounded by tall concrete walls on most sides; one segment along Kosciuszko Street has a tall, open metal fence, allowing for views through the site to the outdoor pool.

As noted above, there is a conventional bike lane through the study area on Dekalb Avenue, as well as a CitiBike station at the northeast corner of Kosciuszko Street and Nostrand Avenue. The B38 and B44 bus routes (including B44 SBS) extend through the study area on Dekalb, Nostrand, and Lafayette Avenues, and the Project Area/Development Site is immediately adjacent to a stop for the B44/B44 SBS. The B38 bus runs mostly along DeKalb Avenue, as well as eastbound on Lafayette Avenue (as part of a one-way pair), between downtown Brooklyn and the Ridgewood neighborhood of Queens. The B44 bus runs mostly along Nostrand Avenue, as well as northbound on Rogers Avenue or New York Avenue and Bedford Avenue (as part of a one-way pair), between the Sheepshead Bay and Williamsburg neighborhoods of Brooklyn. There is also one subway station in the study area, the Bedford-Nostrand Avenues G train station at Lafayette Avenue. Street trees are interspersed throughout the study area. The only public open space within the study area is the western edge of the Kosciuszko Pool complex, which is a 2.39-acre recreational facility with an Olympic-sized swimming pool, a wading pool, a mushroom water feature, locker rooms, and grand stands.

As detailed in Attachment E, "Historic and Cultural Resources," there are no known architectural resources within the study area. Six buildings in the study area have been identified as potential architectural resources, including the Mid-century Modern-style Marcy Branch of the Brooklyn Public Library, three 4-story Romanesque Revival-style apartment buildings on Spencer Court, and a 2-story Italianate-style residential building on Lafayette Avenue.

Newer construction in the study area includes 13 Spencer Court, a narrow, 12-story apartment building at the southwest corner of the project block, which was built circa 2009; 627 Dekalb

Avenue, a 7-story cast stone and brick apartment building east of Nostrand Avenue, constructed circa 2016; 276 Nostrand Avenue, a 6-story apartment building with ground-floor retail, directly south of the Development Site (constructed circa 2016); and 255 Nostrand Avenue, also a 6-story apartment building with ground-floor retail (recently completed) (see views 6 and 7 of **Figures F-8 and F-9**). In terms of area, the largest development in the study area is the large big-box store—a Home Depot—directly north of the Development Site, which adjoins a 2-story, large-footprint building occupied by the Brooklyn Job Corps Academy and is surrounded by a large, fenced surface parking area (see views 8 and 9 of **Figures F-8 and F-9**). The study area also includes the 5-story red brick P.S. 054/Samuel C. Barnes building, which has frontages on Sandford Street and Nostrand Avenue directly north of the Home Depot; the Bedford Medical Office, a 2-story light brown brick building facing the Development Site on the east side of Nostrand Avenue, with a fenced surface parking area in the rear of its lot; a number of older 3- and 4-story residential buildings (some with front stoops); and a few institutional buildings (see views 10–14 of **Figures F-9 through F-11, and Figure F-12**). Land uses within the study area are predominately residential, but also include commercial, community facility, transportation, and open space uses. There are several contiguous parcels of vacant land along Dekalb Avenue east of Nostrand Avenue and along Lafayette Avenue west of Nostrand Avenue, as well as a large parcel currently in use as a surface parking facility at the northwest corner of Dekalb Avenue and Walworth Street.

Most of the narrower lots within the study area, as well as the Home Depot site (zoned M1-5 with maximum permitted FAR of 5.0-6.5) and Bedford Medical Office site (zoned R6A with maximum permitted FAR of 3.0) , are developed with a built FAR of 0.5–1.5; however, the western portion of the project block (zoned R7A with a maximum permitted FAR of 4.6) is generally developed to a built FAR of up to 3.5, and there are a few parcels in the area that are developed to a built FAR of 3.5–5.0. The parcels in the study are with the highest built FAR include 627 Dekalb Avenue at 2.8 FAR (maximum permitted 3.0 FAR), 598 Lafayette Avenue, which is developed with a 5-story grandfathered building in institutional use at 3.57 FAR (maximum permitted 2.2 FAR), and 114 Kosciuszko Street, which is developed with the grandfathered 3-story P.S. 256/Benjamin Banneker school building at 4.0 FAR (maximum permitted 3.0 FAR).

Lot coverage in the study area varies, with Lot 49 and the Bedford Medical Office site directly west and east of the Development Site at 20–40 percent; other sites on the project block and directly to the south and northeast have lot coverage in the 80–100 percent range. Narrower, smaller lots in the study area have lot coverages ranging from 20 to 80 percent. The tallest buildings in the study area are the 12-story 13 Spencer Court apartment building at the southwest corner of the project block, the 7-story apartment building on adjacent Lot 49; and the recently constructed 7-story apartment building at 627 Dekalb Avenue. As noted above, other buildings in the study area are generally less than five stories tall.

VISUAL RESOURCES/VIEW CORRIDORS

Visual resources are an area's unique or important public view corridors, vistas, or natural or built features. These can include historic structures, parks, natural features (such as rivers), or important views.

DEVELOPMENT SITE

There are no visual resources on the Development Site, which as noted above is vacant and surrounded by construction fencing. From the sidewalks adjacent to the Development Site, views



View south on Nostrand Avenue from Kosciuszko Street, showing new development on both sides of street **7**



Development on north side of Dekalb Avenue, view northwest from Nostrand Avenue **8**



View north on Walworth Street from Dekalb Avenue **9**



View west on Kosciuszko Street from east of Nostrand Avenue. 13 Spencer Court building is visible in the background **10**

Photographs of Study Area



View north on Nostrand Avenue from Lafayette Avenue **11**



Lafayette Avenue, looking east from west of Nostrand Avenue **12**

Photographs of Study Area

Figure F-11



View east on Dekalb Avenue from east of Nostrand Avenue **13**



View east on Kosciuszko Street from west of Development Site **14**

Photographs of Study Area

Figure F-12

extend for long distances but do not include any notable visual landmarks (see views 2 and 3 of **Figures F-6 and F-7**).

REMAINDER OF THE PROJECT AREA (PART OF LOT 49)

The building on Lot 49 is not identified as a visual resource. As with the sidewalks adjacent to the Development Site, views the sidewalks adjacent to the remainder of the Project Area extend for long distances to the east and west, but do not include any notable visual landmarks. From the sidewalk adjacent to the Project Area on Kosciuszko Street looking west, the modern 12-story apartment building at the western edge of the project block can be seen, as well as the larger-scale New York City Housing Authority (NYCHA) Lafayette Houses complex in the far distance (see view 3 of **Figure F-7**).

STUDY AREA

Within the study area, P.S. 054 on Nostrand Avenue has the most notable visual presence, particularly in views north and south along nearby portions of Nostrand Avenue, views on Sandford Street south of Willoughby Avenue, and views west on Hart Street from east of Nostrand Avenue. The unadorned white walls of the Home Depot building facing Nostrand and Dekalb Avenues are also noticeable, given their scale. Views south on Walworth Avenue end at the project block; views south on Spencer Street/Spencer Court end at Kosciuszko Street; and views west on Pulaski Street end at Nostrand Avenue.

E. THE FUTURE WITHOUT THE PROPOSED ACTIONS

DEVELOPMENT SITE

In the No Action condition, the Applicant is likely to develop an as-of-right residential and community facility building on the Development Site consistent with the site's existing R7A zoning. The No Action Development would be nine stories (95 feet) tall with approximately 249,465 gsf of residential floor area (305 dwelling units, including 61 affordable units), approximately 25,060 gsf of community facility space on the ground floor and cellar levels, and approximately 122 accessory parking spaces (see **Figures F-13 and F-14**). Refer to **Table F-1** below for a summary of how the No Action Development's FAR, zoning floor area, height, and parking count compares to underlying R7A zoning requirements. The No Action Development will change the urban design and visual character of the Development Site and bring greater activity to the area.

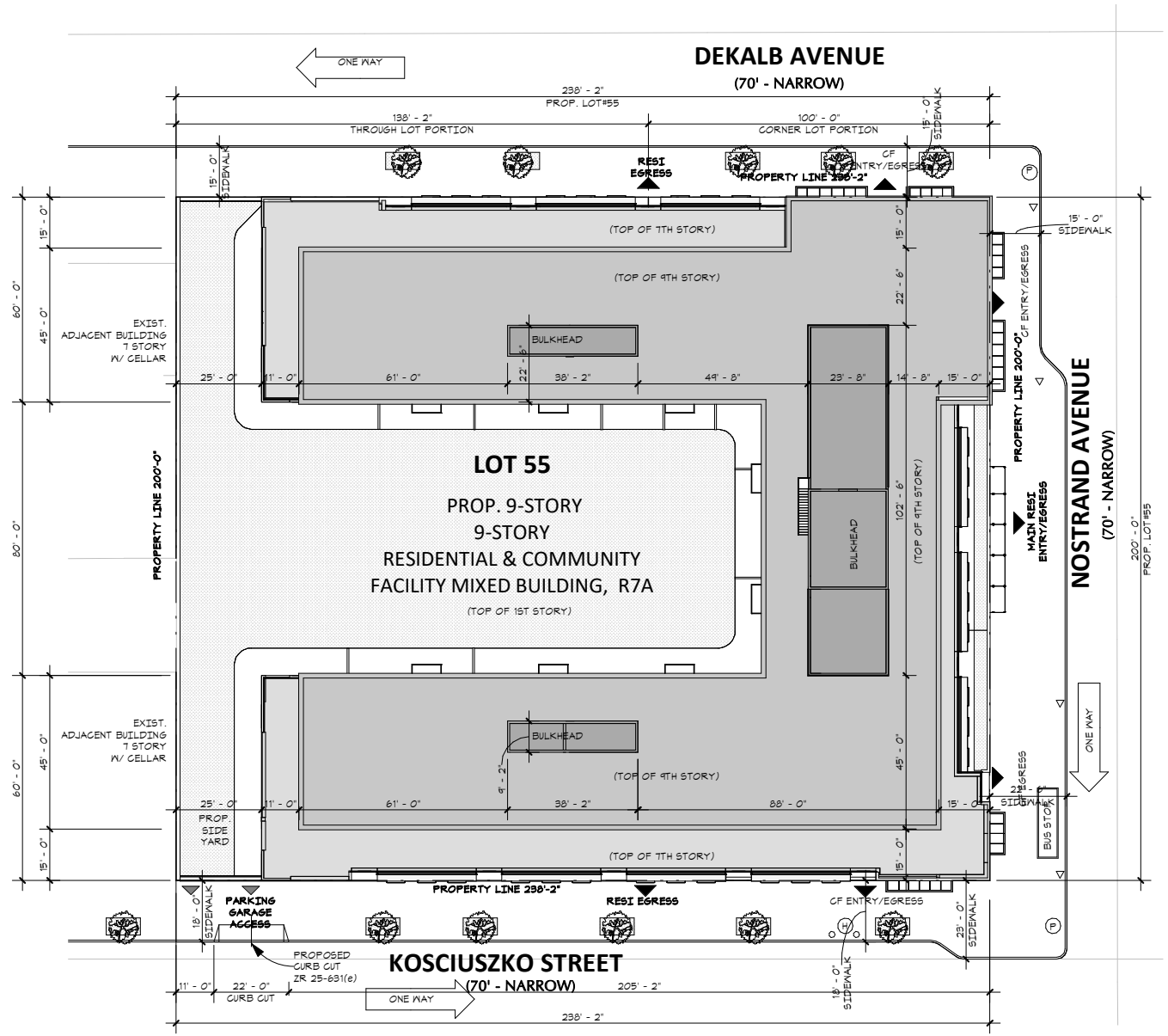
Table F-1
No Action Development Zoning Analysis

Zoning District	Maximum Permitted FAR	Proposed FAR	Maximum Permitted Zoning Floor Area (sf)	Proposed Zoning Floor Area (sf)	Maximum Permitted Building Height (stories/ft)	Proposed Building Height (stories/ft)	Maximum Parking Spaces Required	Proposed Parking Spaces
R7A	4.0 (4.6 IH)	4.6	219,116 sf	219,079 sf	9 stories/ 95 feet	9 stories/ 95 feet	122[1]	122

Note: [1] The No Action Development requires parking for 50 percent of the 244 market rate units proposed (122 spaces). Since the Development Site is located in the Transit Zone, no parking is required for the 61 affordable units.
Sources: GF55 Partners, New York City Zoning Resolution

REMAINDER OF THE PROJECT AREA (PART OF LOT 49)

In the No Action condition, the remainder of the Project Area is expected to remain as in existing conditions.

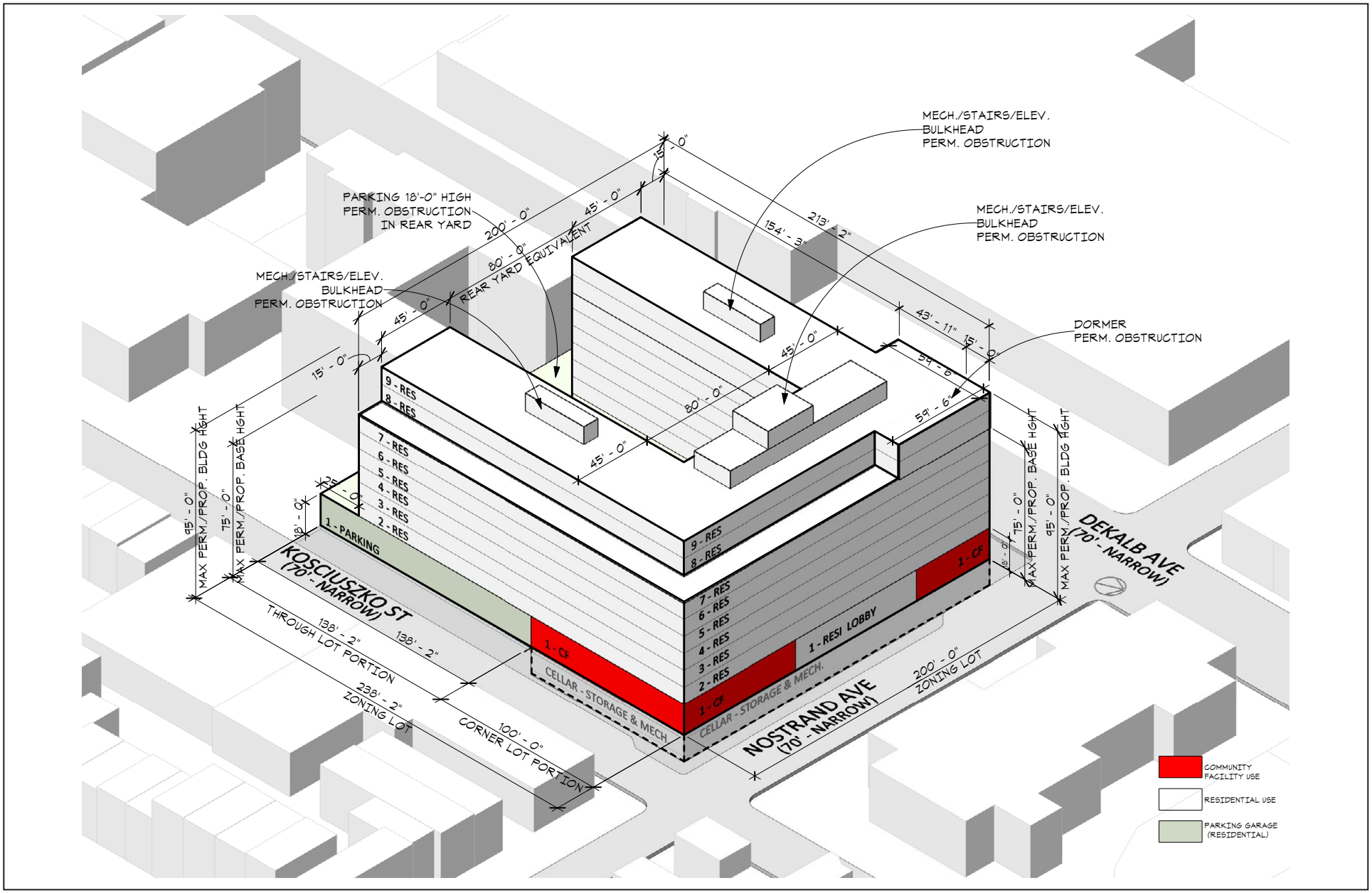


Source: GF55 Partners

No Action — Development Site Plan

270 NOSTRAND AVENUE

Figure F-13



Source: GF55 Partners

No Action Development — Conceptual Massing

270 NOSTRAND AVENUE

Figure F-14

STUDY AREA

Within the 400 foot study area, there are two known development projects that are currently anticipated to be completed by 2023 (see Figure B-3 in Attachment B, "Land Use, Zoning, and Public Policy"). Two City-owned lots to the east at 633-639 and 648-654 Dekalb Avenue are proposed for disposition to a developer selected by the Department of Housing Preservation and Development (HPD) to facilitate approximately 82 new units of affordable housing. These projects are anticipated to change the visual character of the study area, eliminating the contiguous parcels of vacant land along Dekalb Avenue and bringing new activity to the surrounding area.

F. THE FUTURE WITH THE PROPOSED ACTIONS

URBAN DESIGN

DEVELOPMENT SITE

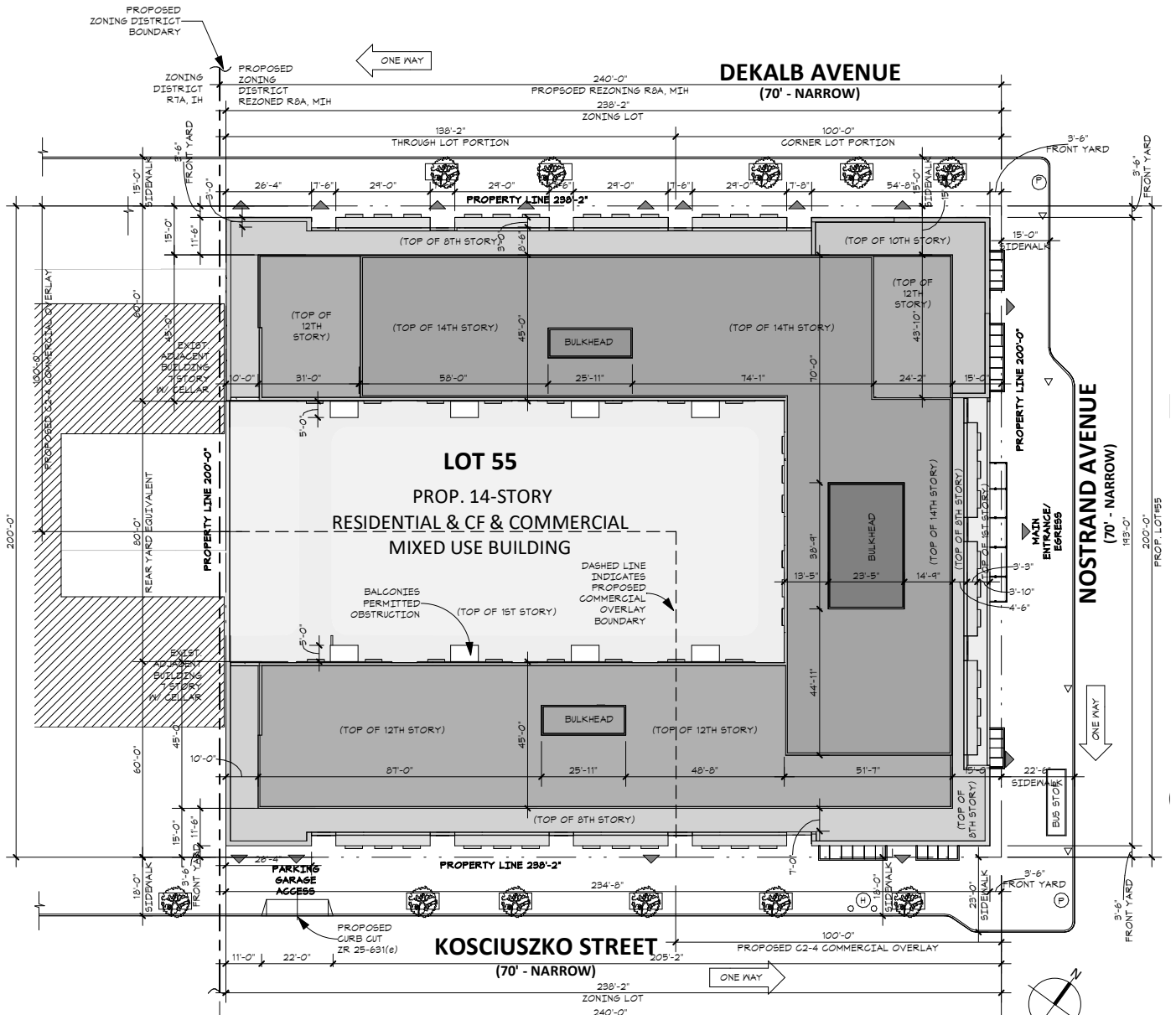
In the With Action condition, the applicant would construct the Proposed Development on the Development Site. The Proposed Development would be a 14-story (approximately 145 foot tall), 444,289 gsf mixed-use building containing residential, retail, and community facility uses and accessory parking. Two new adjacent curb cuts would be located on Kosciuszko Street, approximately 206 feet west of the corner of Nostrand Avenue. A total of 137 accessory off-street parking spaces for the market rate dwelling units would be required, pursuant to ZR Sections 25-23 and 25-251, and a total of 176 accessory off-street parking spaces for the residential use would be provided. Because only 11 accessory off-street parking spaces would be required for the commercial retail (less than 40, the minimum number that would trigger a parking requirement), no parking for the commercial use would be required, pursuant to ZR Section 36-232.

Compared to the No Action Development, the Proposed Development would have approximately 171,411 gsf of additional residential space, approximately 22,285 gsf of additional retail space, approximately 23,932 gsf less community facility space, and approximately 54 additional accessory parking spaces. The Proposed Development would be approximately 50 feet taller than the No Action Development. See **Figures F-15 through F-18** for plans, sections, and illustrative renderings of the With Action condition.

Figures **F-19a through F-19f** provide pedestrian view renderings depicting the existing, No Action, and With Action conditions from the following six vantage points around the Development Site:

- Looking north along Nostrand Avenue
- Looking south along Nostrand Avenue
- Looking east along DeKalb Avenue
- Looking west along DeKalb Avenue
- Looking east along Kosciuszko Street
- Looking west along Kosciuszko Street

Like the No Action Development, the Proposed Development would have a U-shaped footprint above the first floor; however, the No Action Development would rise to a maximum base height of 75 feet, set back 15 feet at the 7th floor on Dekalb Avenue and Kosciuszko Street and rise to a maximum building height of 95 feet.The upper floors of the No Action Development would not extend all the way west to the lot line. The Proposed Development would have a ground floor setback of 3 feet 6 inches on all three frontages. The Proposed Development would rise to a

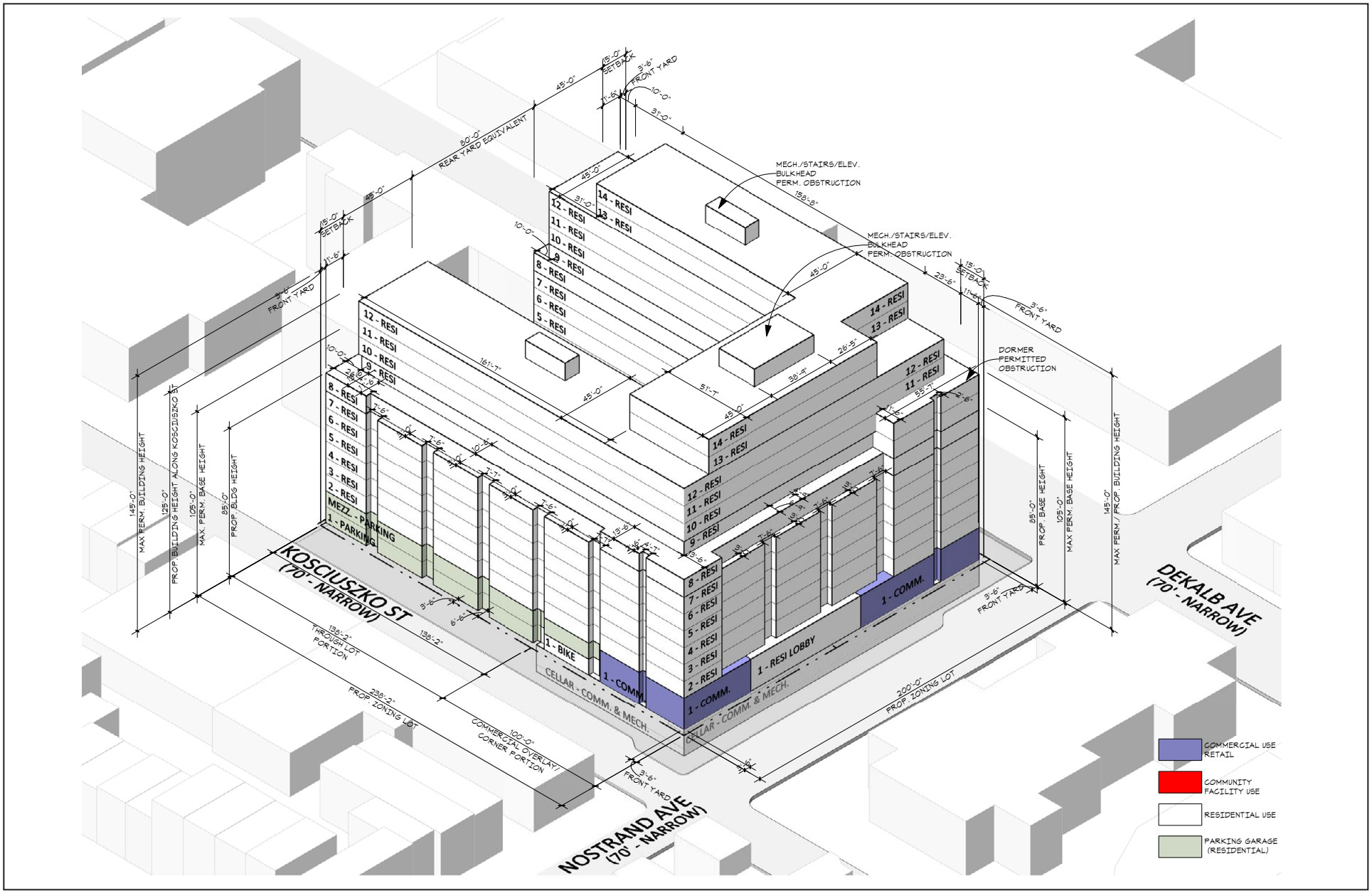


Source: GF55 Partners

Proposed Development — Site Plan

270 NOSTRAND AVENUE

Figure F-15



Source: GF55 Partners

Proposed Development — Conceptual Massing

270 NOSTRAND AVENUE

Figure F-16

11.23.20

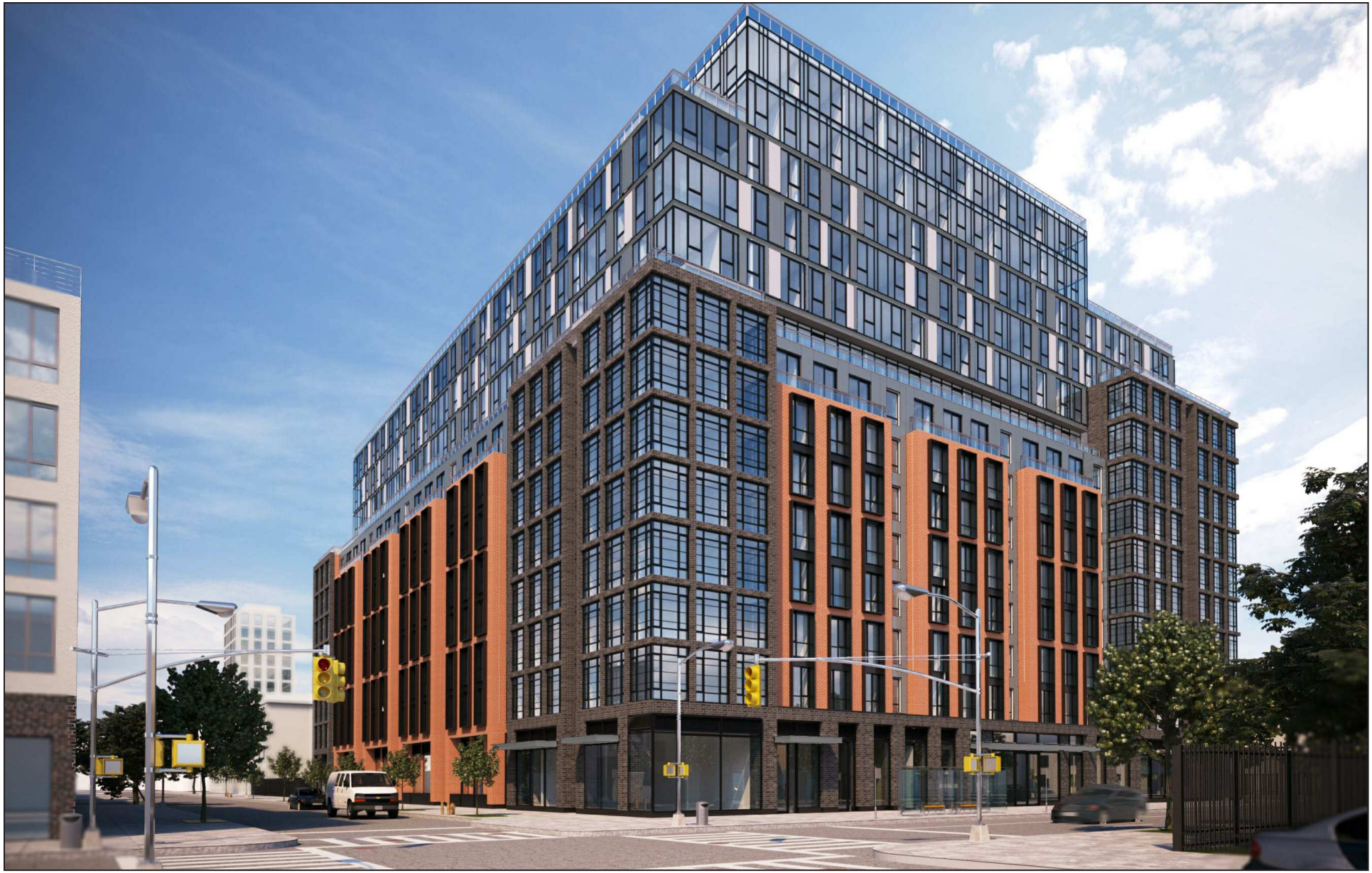


Source: GF55 Partners

Illustrative Renderings of Proposed Development
Dekalb and Nostrand Avenues

270 NOSTRAND AVENUE

Figure F-17

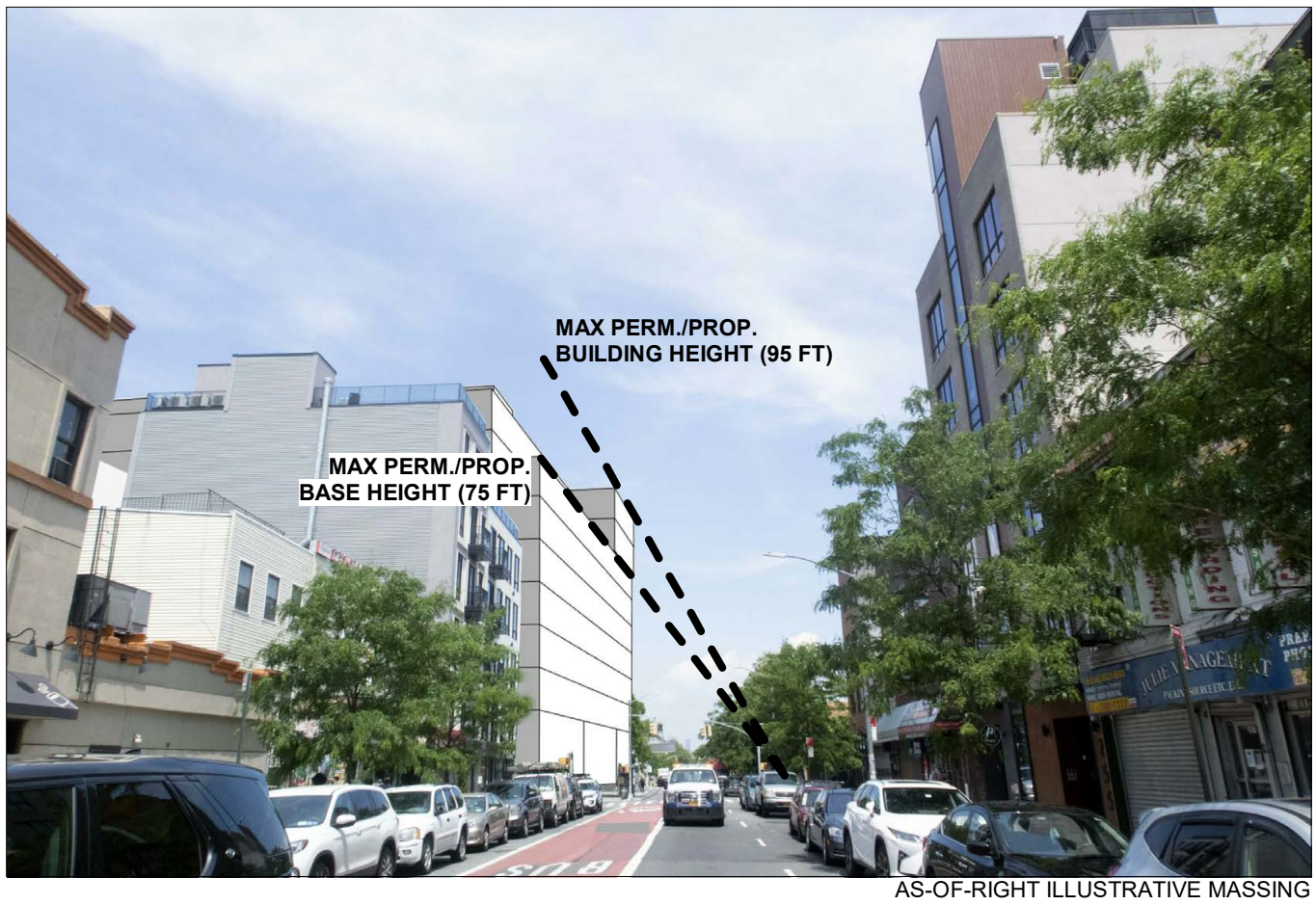


Source: GF55 Partners

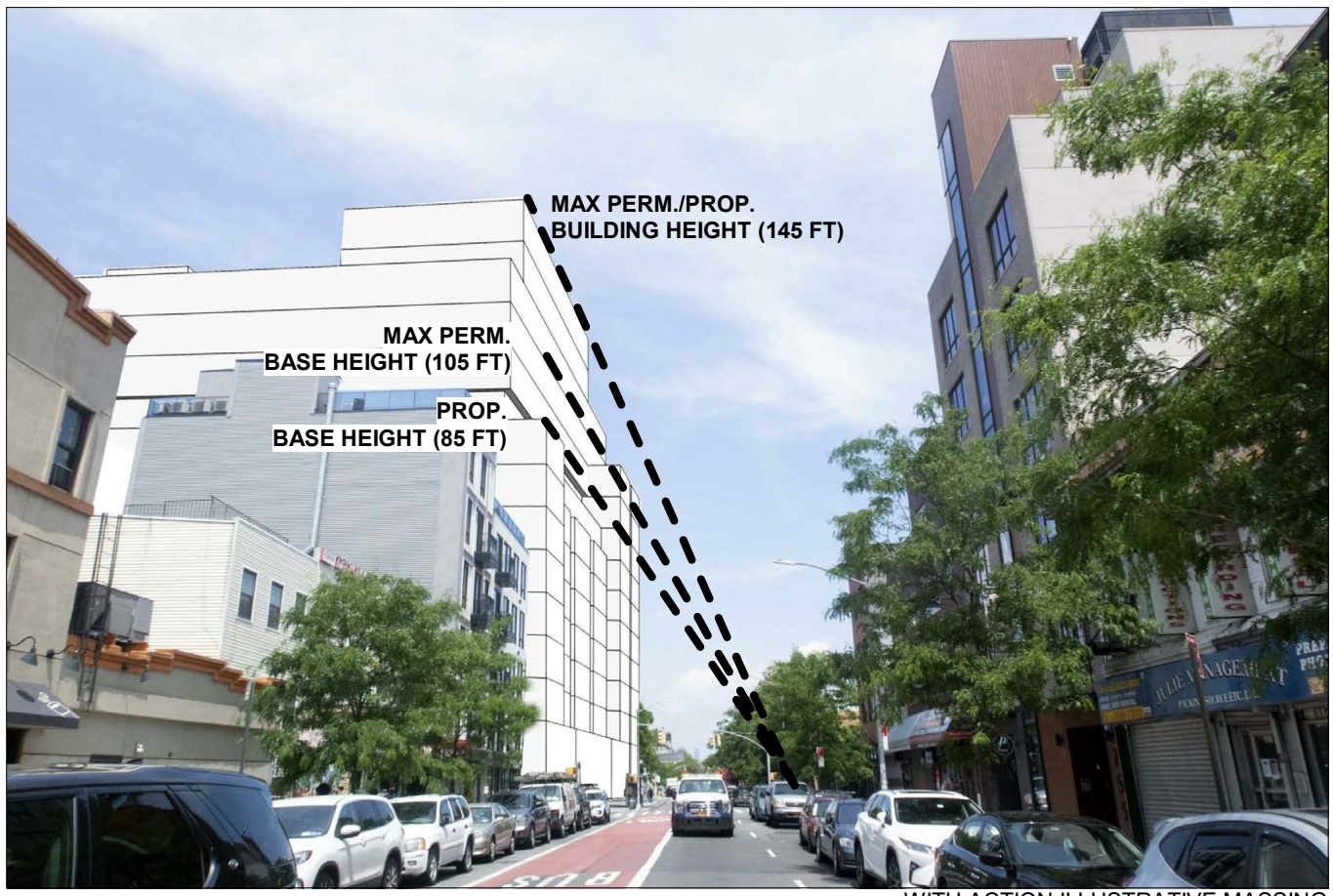
Illustrative Renderings of Proposed Development
Kosciusko Street and Nostrand Avenue



EXISTING CONDITIONS



AS-OF-RIGHT ILLUSTRATIVE MASSING



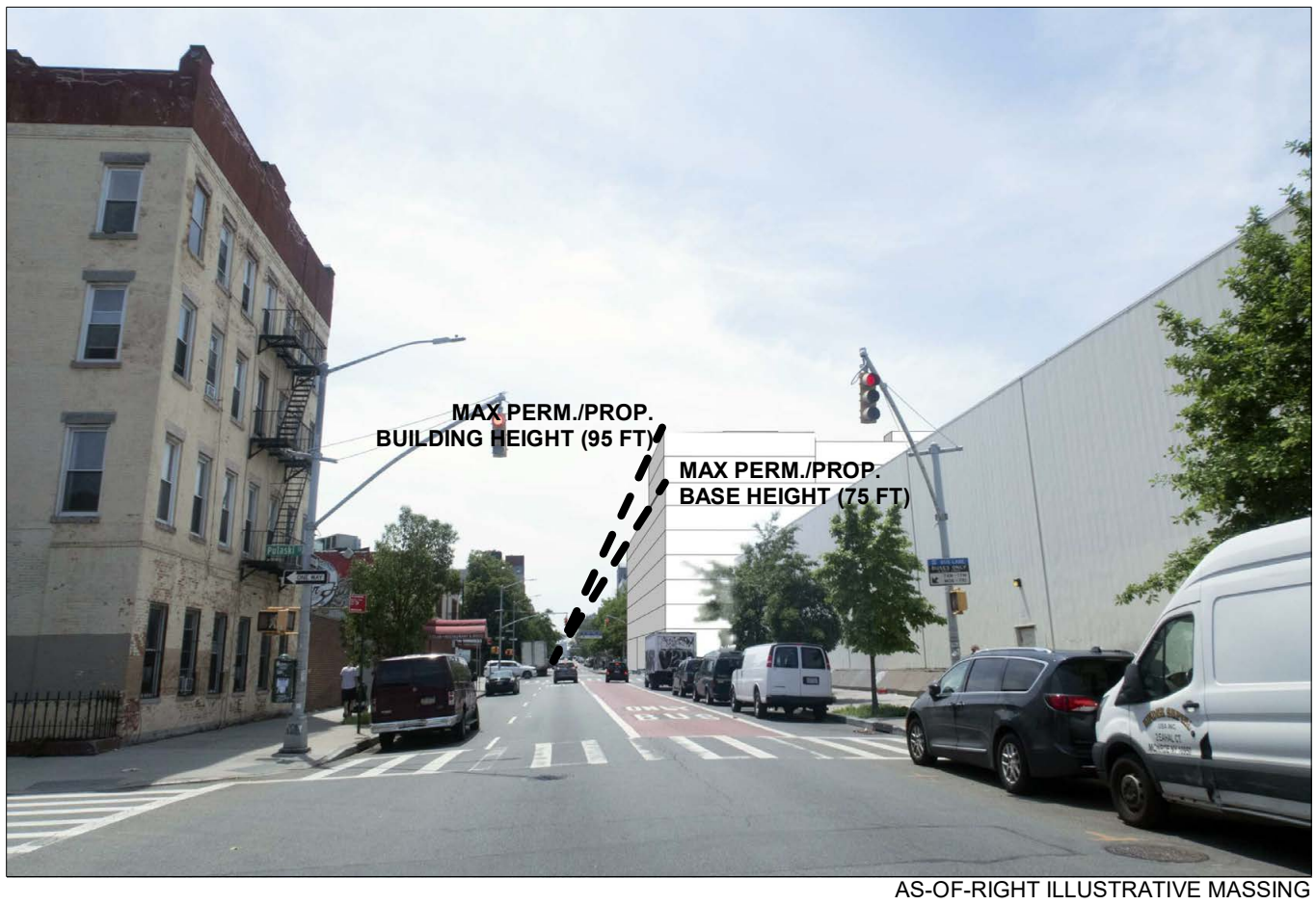
WITH ACTION ILLUSTRATIVE MASSING

Source: GF55 Partners

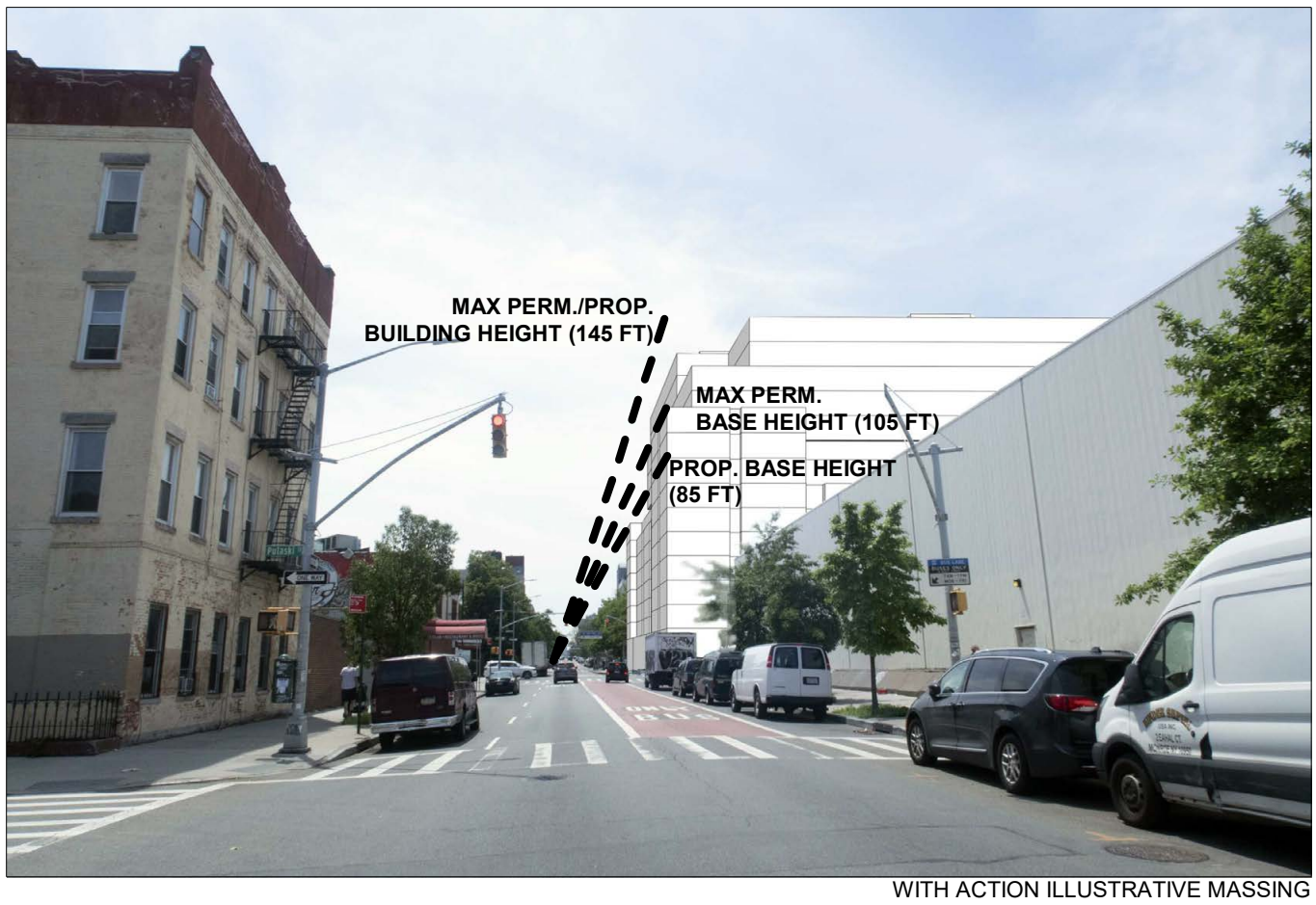
Pedestrian Perspective Massing — Nostrand Avenue Looking North



EXISTING CONDITIONS



AS-OF-RIGHT ILLUSTRATIVE MASSING



WITH ACTION ILLUSTRATIVE MASSING

Source: GF55 Partners

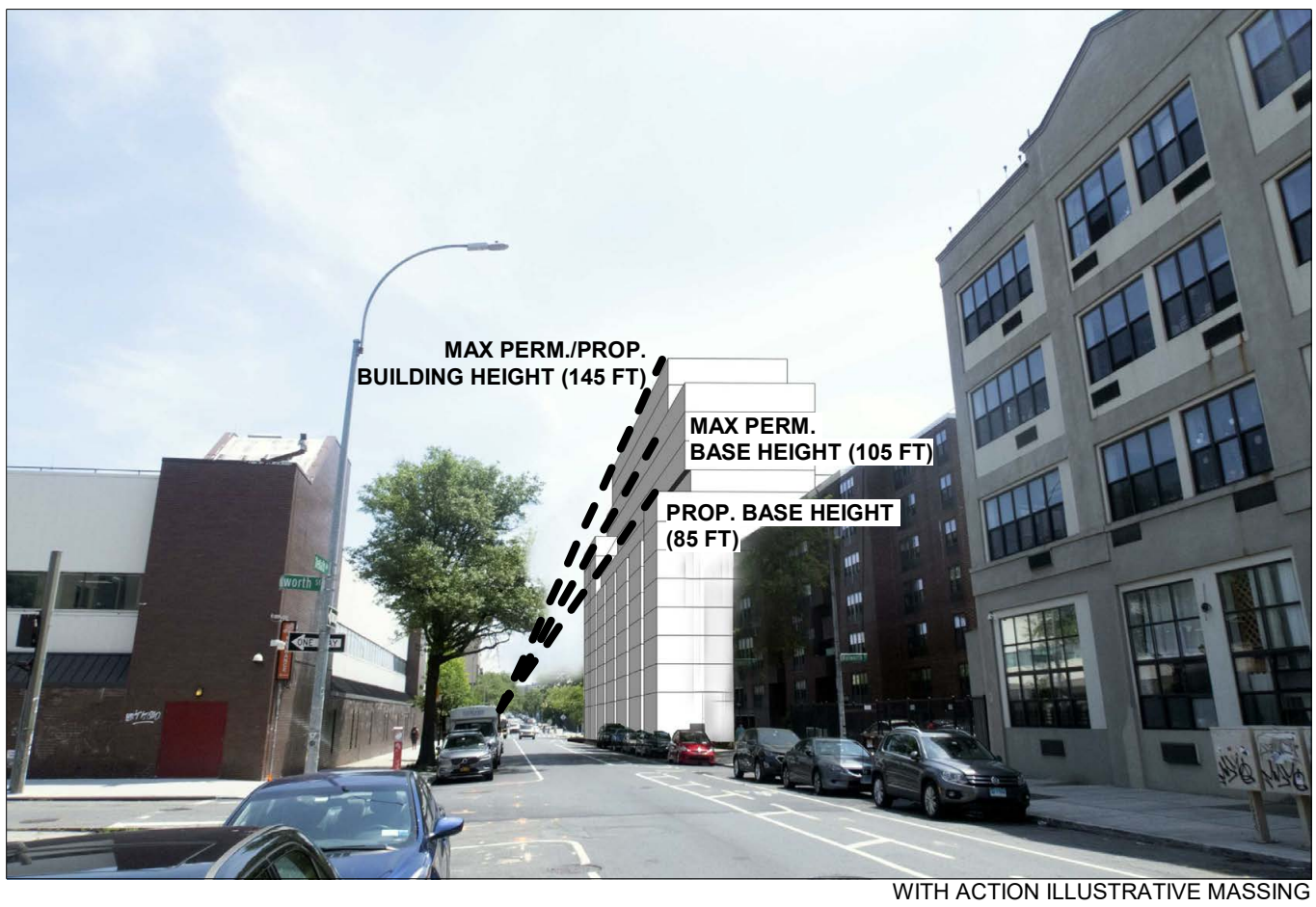
Pedestrian Perspective Massing — Nostrand Avenue Looking South



EXISTING CONDITIONS



AS-OF-RIGHT ILLUSTRATIVE MASSING



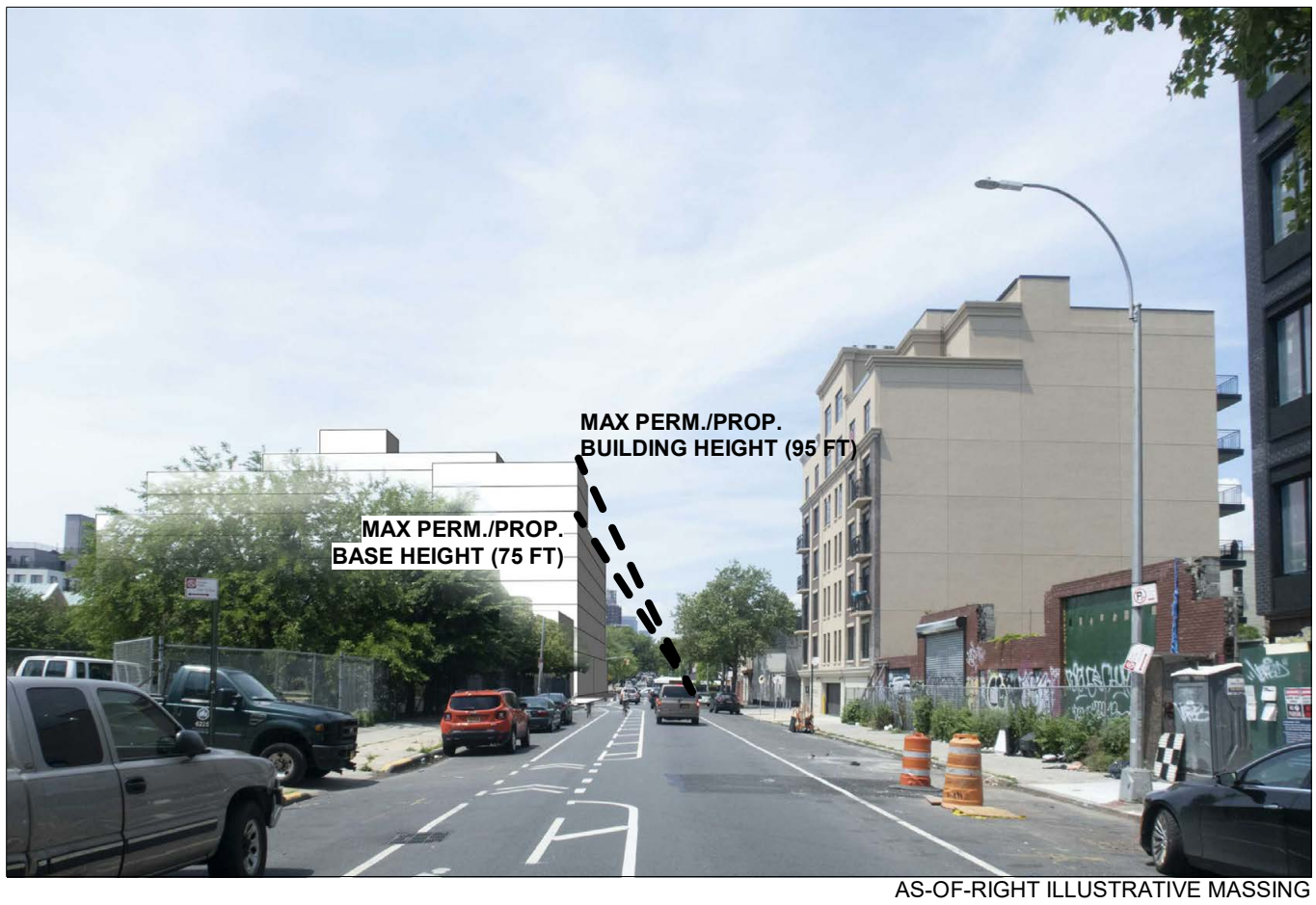
WITH ACTION ILLUSTRATIVE MASSING

Source: GF55 Partners

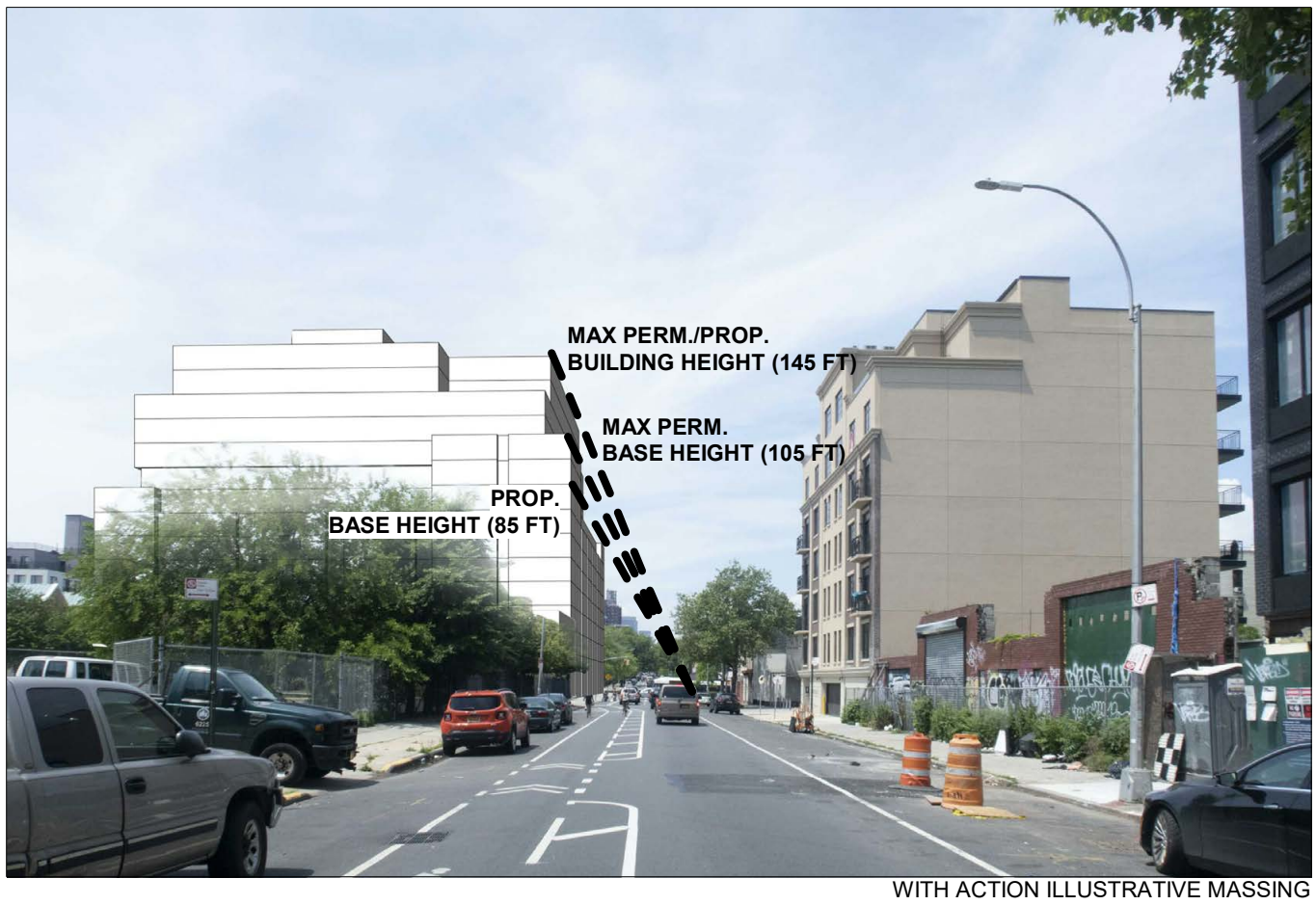
Pedestrian Perspective Massing — Dekalb Avenue Looking East



EXISTING CONDITIONS



AS-OF-RIGHT ILLUSTRATIVE MASSING



WITH ACTION ILLUSTRATIVE MASSING

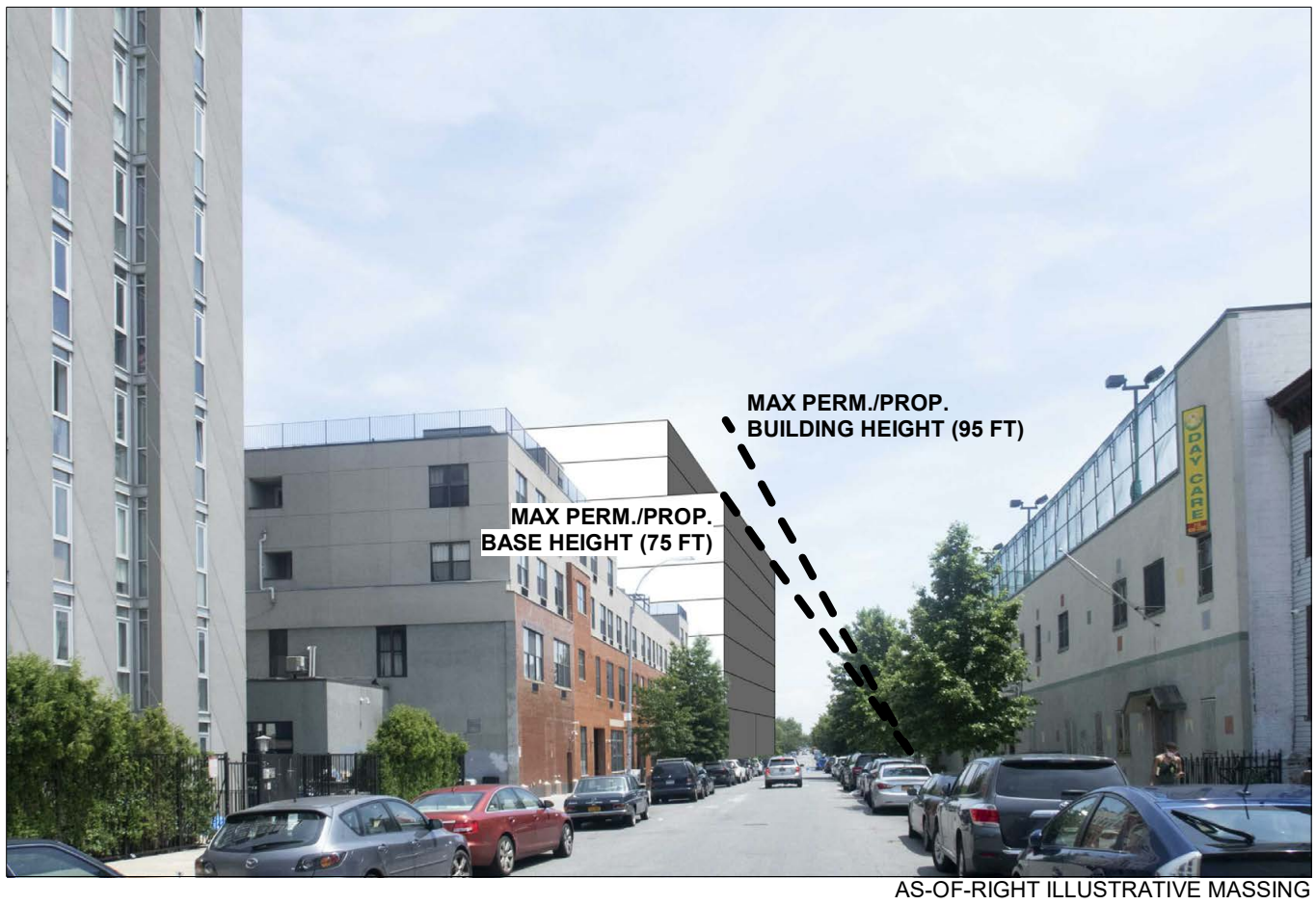
Source: GF55 Partners

Pedestrian Perspective Massing — Dekalb Avenue Looking West

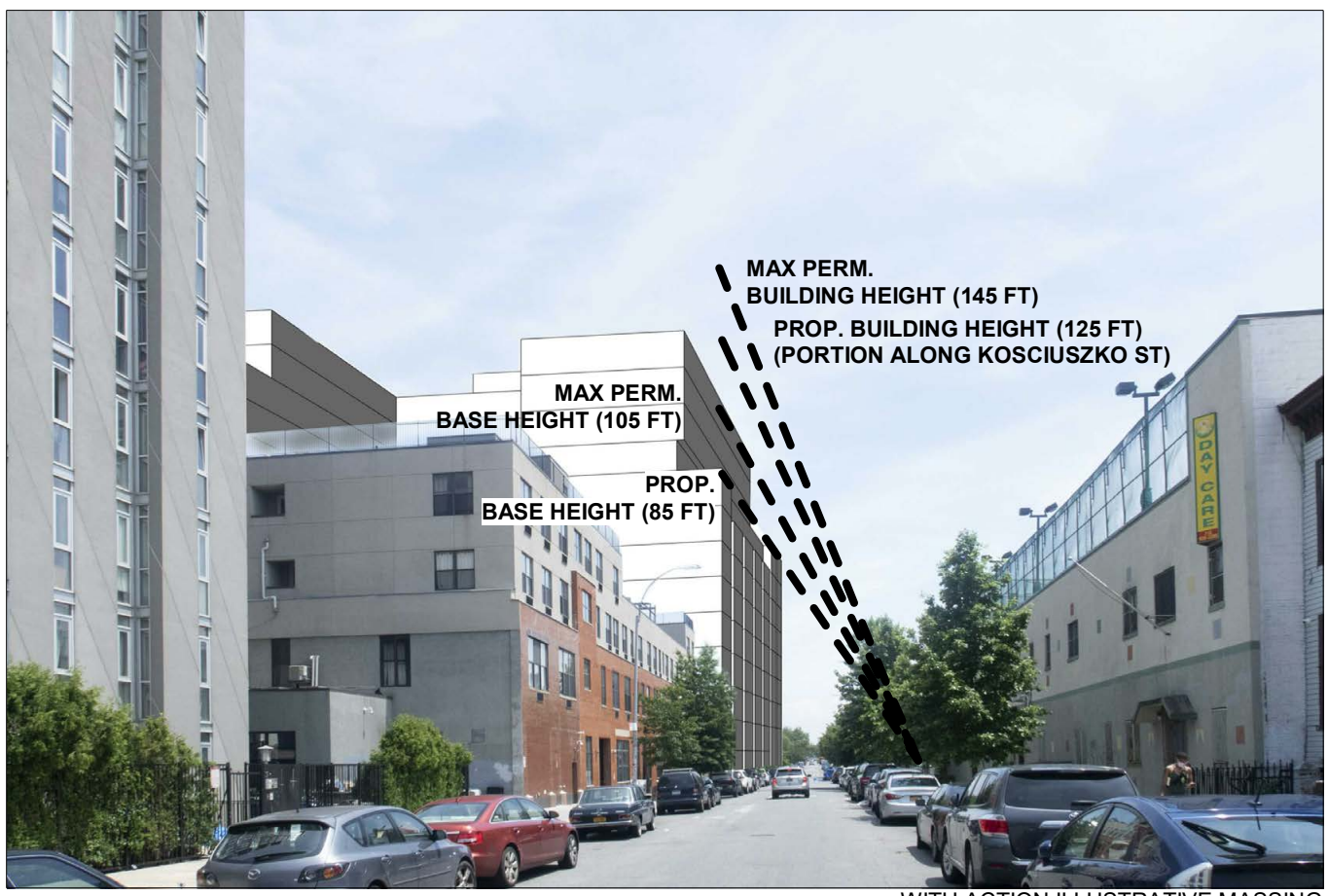
Figure F-19d



EXISTING CONDITIONS



AS-OF-RIGHT ILLUSTRATIVE MASSING



WITH ACTION ILLUSTRATIVE MASSING

Source: GF55 Partners

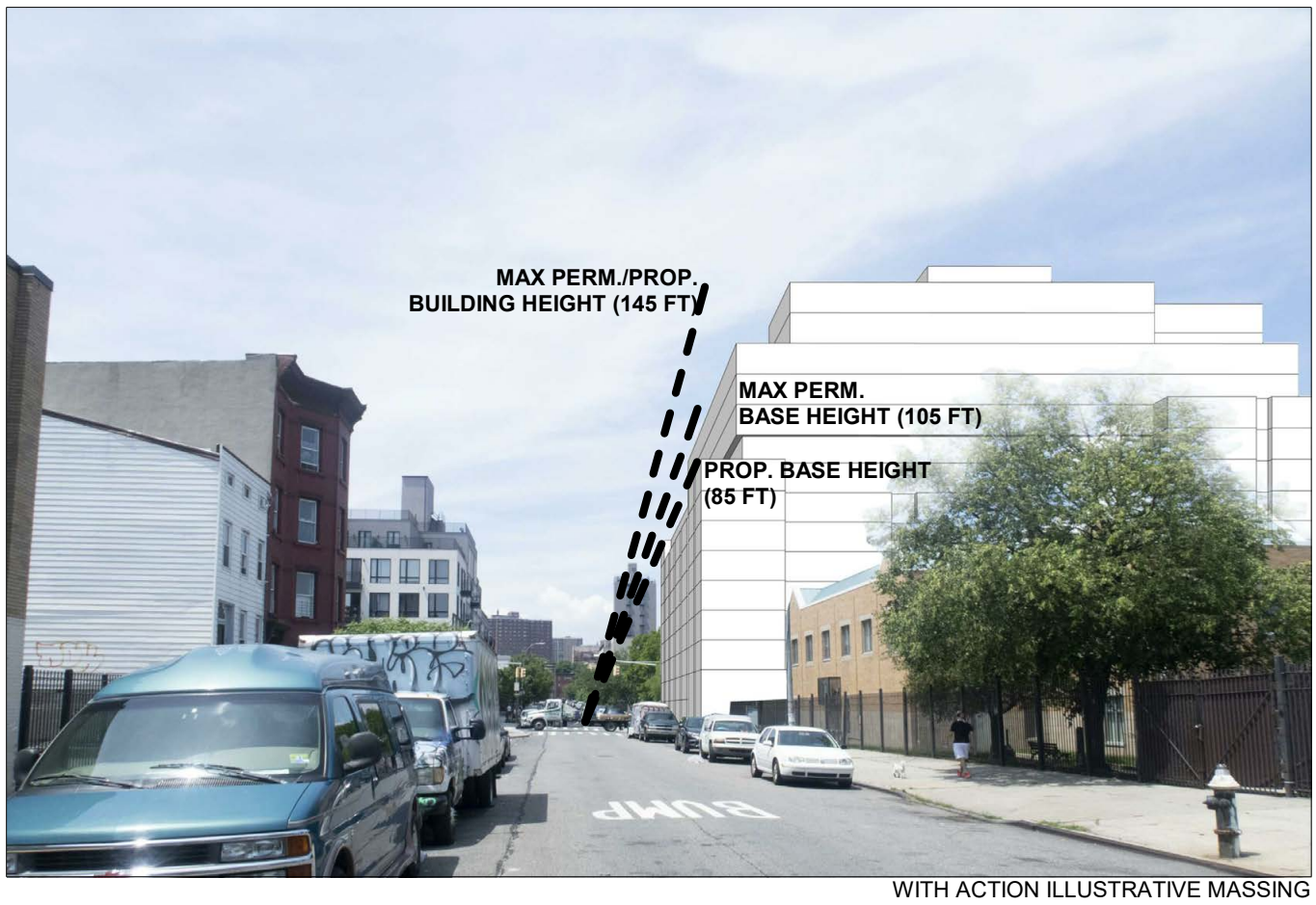
Pedestrian Perspective Massing — Kosciuszko Street Looking East



EXISTING CONDITIONS



AS-OF-RIGHT ILLUSTRATIVE MASSING



WITH ACTION ILLUSTRATIVE MASSING

Source: GF55 Partners

Pedestrian Perspective Massing — Kosciuszko Street Looking West

Figure F-19f

maximum base height of 85 feet, and set back by 11 feet 6 inches (for a total setback from the lot line of 15 feet) at the 8th floor on DeKalb Avenue and Kosciuszko Street. Above the setback, the Proposed Development would rise to a maximum building height of 145 feet on Dekalb and Nostrand Avenues, and 125 feet on Kosciuszko Street. The upper floors of the Proposed Development would extend to the western lot line.

Overall, the density on the Development Site would increase from a built FAR of 4.6 (No Action condition) to a built FAR of approximately 7.2 (With Action condition). The Proposed Development would conform to the bulk, height, setback and use regulations pursuant to the proposed zoning district of R8A/C2-4.

At 12 to 14 stories tall (approximately 125 to 145 feet, not including mechanical bulkhead), the new building would be approximately 3 to 5 stories (approximately 30 to 50 feet) taller than the No Action Development. The footprint of the Proposed Development would occupy approximately the entire lot, similar to the No Action condition; therefore, the proposed lot coverage would be the same as the lot coverage in the No Action condition. Refer to **Table F-2** below for a summary of how the Proposed Development's FAR, zoning floor area, height, and parking count compares to the requirements of the proposed R8A/C2-4 zoning requirements. Similar to the No Action condition, the Proposed Development would be expected to create strong, continuous streetwalls along Dekalb and Nostrand Avenues and Kosciuszko Street, and would enliven the streetscape with its addition of community facility and ground-floor retail spaces.

Table F-2
Proposed Development Zoning Analysis

Zoning District	Maximum Permitted FAR	Proposed FAR	Maximum Permitted Zoning Floor Area (sf)	Proposed Zoning Floor Area (sf)	Maximum Permitted Building Height (stories/ft)	Proposed Building Height (stories/ft)	Maximum Parking Spaces Required	Proposed Parking Spaces
R8A/C2-4	7.2	7.2	342,965 sf	342,921 sf	14 stories/ 145 feet	14 stories/ 145 feet	137[1]	176

Note: [1] The Proposed Development requires parking for 40 percent of the 343 market rate units proposed (137 spaces). Since the Development Site is located in the Transit Zone, no parking is required for the 144 affordable units.
Sources: GF55 Partners, New York City Zoning Resolution

REMAINDER OF THE PROJECT AREA (PART OF LOT 49)

No changes are anticipated to the remainder of the Project Area in the future with the Proposed Actions. The existing 7-story building on Lot 49 would remain.

STUDY AREA

The Proposed Actions would not result in any changes to buildings, natural features, open spaces, or streets in the study area. The proposed residential, retail, and community facility (medical office) uses would be consistent with land uses in the study area. The height of the Proposed Development (at 145 feet on Dekalb and Nostrand Avenues, and 125 feet along Kosciuszko Street) would be taller than any building in the study area, but would be similar to the 12-story building at the western edge of the project block (at 31 Kosciuszko Street), which is 135 feet tall. The Proposed Building would also be only 30 to 50 feet taller than the No Action Development. As described above, the Proposed Development would have a built FAR of approximately 7.2 and a lot coverage of approximately 100 percent; in comparison, the No Action Development would have a built FAR of approximately 4.6 and a lot coverage of approximately 100 percent. While the Proposed Development's built FAR of 7.2 is higher than other buildings in the neighborhood,

as noted above the overall height would not be much greater than the building at 31 Kosciusko Street, and along Kosciusko Street the Proposed Development would be 10 feet shorter than the building at 31 Kosciusko Street. Similar to the No Action condition, the Proposed Development would create a continuous streetwall.

VISUAL RESOURCES/VIEW CORRIDORS

DEVELOPMENT SITE

As described above, there are no visual resources on the Development Site. The Proposed Actions would not have a significant adverse effect to adjacent view corridors. From the sidewalks adjacent to the Development Site, views to the west and east could continue to extend for long distances.

REMAINDER OF THE PROJECT AREA (PART OF LOT 49)

As described above, there are no visual resources within the remainder of the Project Area. The Proposed Actions would not have a significant adverse effect to adjacent view corridors. Views from the sidewalks adjacent to the Project Area on Dekalb Avenue and Kosciuszko Street would continue to extend for long distances to the east and west, and would include the modern 12-story apartment building at 13 Spencer Court, as well as the larger-scale NYCHA Lafayette Houses complex in the far distance.

STUDY AREA

The Proposed Development would be notable in views along surrounding streets, particularly along Dekalb and Nostrand Avenues and Kosciuszko Street; however, in these views, the height and scale of the Proposed Development would have a similar appearance to the No Action Development. The Proposed Development would not obstruct any existing view corridors, and would not obstruct or eliminate views to any visual landmarks in the surrounding area. P.S. 054 would continue to have a notable visual presence in views north and south along nearby portions of Nostrand Avenue, as well as views on Sanford Street south of Willoughby Avenue, and views west on Hart Street from east of Nostrand Avenue. The Proposed Actions would not partially or totally block a view corridor or a natural or built visual resource. Therefore, the Proposed Actions would not significantly adversely affect the context of natural or built visual resources, or any view corridors.

In conclusion, the Proposed Actions would not result in any significant adverse impacts related to urban design or visual resources. ✶

A. INTRODUCTION

This attachment presents the findings of the hazardous materials assessment and assesses potential areas of concern that could pose a hazard to workers, the community, and/or the environment as a result of the Proposed Actions. As described in Attachment A, "Project Description and Screening Analyses," the Proposed Actions would result in the construction of an approximately 444,289 gross square foot (gsf) mixed-use building containing residential, commercial, and community facility uses (the "Proposed Development") at 270 Nostrand Avenue (Block 1778, Lot 55 – the "Development Site").

The Proposed Development would require excavation similar to that for the No Action condition.

PRINCIPAL CONCLUSIONS

The Proposed Actions would not result in significant adverse impacts related to hazardous materials. Based on the assessment (outlined below), the potential for significant adverse impacts related to hazardous materials resulting from the Proposed Actions would be precluded through compliance with existing regulatory requirements and the Department of Environmental Protection (DEP)–approved Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP), approved in January 2020.

METHODOLOGY

As described in Chapter 12: Hazardous Materials of the *CEQR Technical Manual*, the purpose of a hazardous materials assessment is to determine whether a proposed action could lead to potential increased human exposure to hazardous materials and whether the increased exposure could lead to significant public health or environmental impacts. The potential for hazardous material conditions was evaluated based on a November 2018 Phase I Environmental Site Assessment (ESA) report and a November 2020 Phase II Subsurface Investigation both prepared by AKRF, Inc.(AKRF) for the Development Site.

B. EXISTING CONDITIONS

TOPOGRAPHY AND SUBSURFACE CONDITIONS

Based on U.S. Geological Survey mapping, the Development Site is approximately 35 to 40 feet above mean sea level (with topography sloping slightly down toward the north) and bedrock is expected to be encountered at approximately 190 feet below grade. Groundwater is expected to be first encountered at approximately 39 feet below grade and, anticipated to flow in a northerly or northwesterly direction toward the Gowanus Canal, approximately 1.3 miles away. Groundwater in this portion of Brooklyn is not used as a source of potable water.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

The Phase I ESA was conducted in November 2018 (i.e., prior to the demolition of the former four-story nursing home building with a partial basement) in accordance with the American Society of Testing Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E1527-13). The Phase I ESA included a review of available records; a site reconnaissance; interviews with a site representative; a review of prior reports; a review of historical fire insurance maps; and an evaluation of regulatory database listings for the Development Site and neighboring properties. The Phase I ESA identified the following Recognized Environmental Conditions (RECs), i.e., "*the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property*":

- A 10,000-gallon No. 2 fuel oil underground storage tank (UST) was historically located on the Development Site, but its (former) location could not be determined from available records. This tank was registered in the New York State Department of Environmental Conservation (NYSDEC) Petroleum Bulk Storage (PBS) database as installed in 1975, and closed-and-removed in 2003. This tank was associated with two closed-status petroleum spills (i.e., generally cleaned up to the satisfaction of NYSDEC) including a tank test failure which was remediated by removal of the tank and contaminated soil. The spill listing indicated that some residual contamination remained along the (now former) building foundation.
- Historical uses of the Development Site including upholstering, a plumbing and heating business, a paint shop, auto repair, and manufacturing may have affected subsurface conditions. The gasoline UST associated with a historical garage on the northern side of the Development Site was likely removed before or during the recently demolished building's construction; however, associated contamination may remain beneath the Development Site.
- At the time of the reconnaissance, an auto repair shop and towing business was located on the south-adjacent block. The surrounding area was mixed-use throughout its history, and historically included: a coal yard; paint shops; a hat factory and clothing factory with felting, dyeing, and chemical storage; laundries (potential dry cleaners) and dry cleaners; auto repair; garages with gasoline USTs; and various factories and industrial uses in close proximity to the Development Site. A steam laundry historically located west of the Development Site on the same block was identified as a hazardous waste generator, Chemical Bulk Storage (CBS) site, and PBS facility with one open petroleum spill and two closed-status petroleum spills. A large IBM/Advanced Technology Solution factory historically located on the north-adjacent block was identified as a hazardous waste generator, Toxic Release Inventory System (TRIS) site, and PBS facility with eight closed-status spills. The reported spills included releases of petroleum, lead-containing waste fluid, and a plasticizing chemical, with the listings indicating subsurface contamination with petroleum and chlorinated solvents.

The Phase I ESA identified a potential for subsurface vapors, and thus a potential for vapor migration into existing and future buildings at the Site, based on the RECs noted above.

The Phase I ESA also identified additional non-REC environmental concerns, including (in the now demolished building) the potential presence of asbestos-containing materials (ACM), lead-based paint (LBP), and/or polychlorinated biphenyls (PCBs) in building components, and the potential presence of historical fill, buried demolition debris and unknown buried tanks, and potential unknown contamination from adjoining properties.

SUBSURFACE (PHASE II) INVESTIGATION

A Phase II Subsurface Investigation (aka Phase II Investigation) was completed at the Development Site by AKRF in November 2020 that included the advancement of nine borings with the collection and laboratory analysis of nineteen soil samples; and, the installation of probes for the collection and laboratory analysis of five soil vapor samples. Results of the investigation are summarized as follows:

- Borings encountered sand and silt, with varying amounts of gravel and fill material (sand with gravel, silt, concrete, brick, ceramics, wood, and organics) to the termination boring depth (15 feet bgs). No elevated photoionization detector (PID) readings (or other visual or olfactory evidence of contamination) were noted in the borings.
- Groundwater was not encountered during the Phase II Investigation due to the significant obstructions present in the subsurface. Based on USGS mapping and a previous geotechnical investigation at the Development Site, groundwater is expected to be encountered approximately 39 feet below grade (i.e., over 20 feet below the anticipated foundation depth of the proposed redevelopment project).
- Soil sample analytical results were compared to 6 NYCRR Part 375 Soil Cleanup Objectives for Unrestricted Use Soil Cleanup Objectives (UUSCOs) and Soil Cleanup Objectives for Restricted – Residential Use (RRSCOs). The soil vapor samples were analyzed for Volatile Organic Compounds (VOCs) by EPA Method TO-15. There are currently no guidance values for VOCs in soil vapor; so soil vapor analytical results were conservatively compared to the New York State Department of Health (NYSDOH) Indoor Air Guideline Values (AGVs) of the *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006, and as subsequently revised. AGVs are intended as a reference for indoor air quality and are therefore not directly applicable to the soil vapor sample results.

The soil analytical results are summarized as follows:

- Acetone was detected above its UUSCO, but below its RRSCO in two soil samples.
- Seven semi-volatile organic compounds (SVOCs), all polycyclic aromatic hydrocarbons (PAHs), a class of compounds most frequently associated with the combustion byproducts commonly present in urban fill material, were detected in up to three soils samples (from one boring) exceeding UUSCOs and/or RRSCOs.
- Seven metals exceeded UUSCOs: barium, chromium, copper, lead, mercury, nickel, and zinc. Of these, three also exceeded RRSCOs: barium (one soil sample), lead (two soil samples) and mercury (one soil sample).
- Total polychlorinated biphenyls (PCBs) were detected in one sample above the UUSCO, but below the RRSCO. Four pesticides (4,4'-DDD, 4,4'-DDE, 4,4'-DDT and dieldrin) exceeded UUSCOs in up to six soil samples, but all were well below RRSCOs.
- The soil detections were attributed to historical fill materials observed in the borings rather than an on-site release.

The soil vapor analytical results are summarized as follows:

- Tetrachloroethene (PCE) was detected in three samples, and trichloroethene (TCE) was detected in two samples at levels above their respective AGVs.
- Several typically petroleum-related compounds, for which there are no AGVs, were detected in the samples.

The concentrations of these compound detected by this investigation are typical of commercial/industrial areas in New York City, and given that the same compounds were not detected at appreciable levels in the Site soil, they do not appear to indicate an on-site release.

C. THE FUTURE WITHOUT THE PROPOSED ACTIONS

Absent the Proposed Actions, it is assumed an as-of-right residential and community facility building would be constructed on the Development Site (the "No Action Development"). The No Action Development would include a partial cellar level. This would entail excavation for the construction of the new building foundations, utility connections, grading, landscaping, etc. Unlike in the future with the Proposed Actions, the controls set out in the next section would not be required though applicable regulatory requirements would need to be followed, e.g., properly disposing of surplus soil; reporting to NYSDEC any signs of a petroleum spill (and removing and registering encountered tanks, along with any contaminated soil); and following applicable New York City Department of Environmental Protection (NYCDEP) requirements should dewatering be required.

D. THE FUTURE WITH THE PROPOSED ACTIONS

In the future with the Proposed Actions, the Development Site—Block 1778, Lot 55—would be redeveloped with a new approximately 444,289 gross square foot (gsf) mixed-use building with a partial cellar containing residential, commercial, and community facility uses with underground parking. This would entail excavation for the construction of the new building foundations, utility connections, grading, etc. similar to those associated with the No Action Development (both would include partial cellar levels). Excavation could disturb any such hazardous materials and increase pathways for human or environmental exposure. To avoid the potential for significant adverse impacts, the following would be incorporated into the Proposed Development:

Based on the results of the Phase II Investigation, a Remedial Action Plan (RAP) and Construction Health and Safety Plan (CHASP) have been prepared for the Development Site that would be implemented during the subsurface disturbance associated with the Proposed Development. The Phase II Investigation, RAP, and CHASP were submitted to NYCDEP for review and approval in December 2020. In a letter dated January 4, 2021, NYCDEP approved the RAP and CHASP for the Proposed Development (see **Appendix A**).

The RAP and CHASP address requirements for items such as soil stockpiling, soil disposal and transportation; dust control; community air monitoring; and contingency measures if additional petroleum storage tanks or other contamination should be unexpectedly encountered during construction. The RAP also includes measures required to be incorporated into the new construction e.g., a vapor barrier beneath/outside of the foundations, a passive sub-slab depressurization system (SSDS) to address potential soil vapor conditions, and a two-foot clean soil cap in any unpaved areas (as specified in the RAP) subject to DEP approval prior to placement at the Site. Upon completion of all NYCDEP-approved remedial requirements, as outlined in the RAP, a P.E.-certified Remedial Closure Report will be submitted to NYCDEP. This report will demonstrate that all remedial activities have been properly implemented.

E. CONCLUSIONS

With the measures outlined above included as part of the Proposed Actions, no significant adverse impacts related to hazardous materials would be anticipated to occur. ✷

A. INTRODUCTION

This attachment examines the potential effects of the Proposed Actions on study area transportation systems. As described in Attachment A, "Project Description and Screening Analyses," the Proposed Actions would rezone the eastern portion of Block 1778 (Lot 55 and part of Lot 49 – the "Project Area" or "Rezoning Area") in the Bedford Stuyvesant neighborhood of Brooklyn, Community District 3. The Proposed Actions would facilitate the development of an approximately 445,085 gross square foot (gsf) mixed-use building containing residential, commercial, and community facility uses along with at-grade and underground parking (the "Proposed Development") at 270 Nostrand Avenue (Block 1778, Lot 55 – the "Development Site"). The Development Site is generally bounded by DeKalb Avenue to the north, Nostrand Avenue to the east, and Kosciuszko Street to the south, as shown in **Figure H-1**.

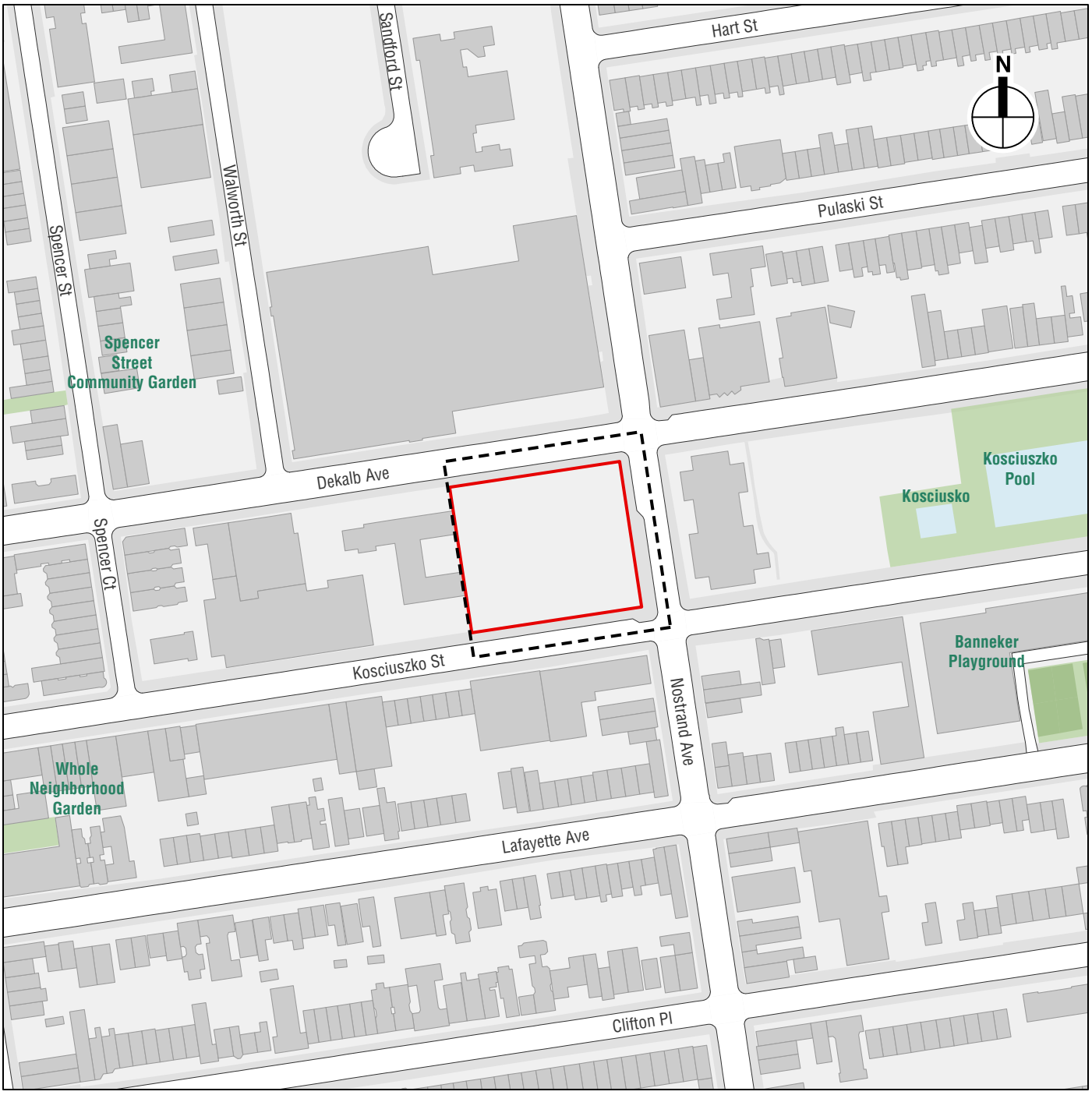
For purposes of this transportation assessment, in the future without the Proposed Actions (the No Action condition), the Development Site would be developed as-of-right (AOR) under zoning as a residential and community facility building with approximately 305 total dwelling units (DUs), 25,060 gsf of community facility space (assumed as a medical office use), and 122 accessory parking spaces for residents. In the future with the Proposed Actions (the With Action condition), the Development Site would be developed with approximately 487 total DUs, 1,128 gsf of community facility space (assumed as a medical office use), 22,285 gsf of local retail space, and 176 accessory parking spaces for residents. **Table H-1** provides a comparison of the development programs for the No Action and With Action conditions.

Table H-1
Comparison of No Action and With Action Conditions—Development Site

Components	No Action	With Action	Increments
Residential (DUs)	305	487	182
Local Retail (GSF)	0	22,285	22,285
Medical Office (GSF)	25,060	1,128	-23,932
Parking (spaces)	122	176	54
Source: BRP East Brooklyn Development LLC; GF55 Partners; and AKRF, Inc.			

This attachment outlines 2014 *City Environmental Quality Review (CEQR) Technical Manual* methodologies in assessing potential transportation-related impacts, estimates anticipated incremental trips associated with the Proposed Actions, and determines if these trips would have the potential to result in significant adverse, traffic, transit, pedestrian, and parking impacts. If impacts are identified, feasible improvement measures would be explored to address those impacts.

1.17.20



0 200 FEET

Development Site

Rezoning Area



Project Location

270 NOSTRAND AVENUE

Figure H-1

B. TRANSPORTATION SCREENING ASSESSMENTS

The *CEQR Technical Manual* recommends a two-tier screening procedure for the preparation of a "preliminary analysis" to determine if quantified analyses of transportation conditions are warranted. As discussed below, the preliminary analysis begins with a trip generation analysis (Level 1) to estimate the volume of person and vehicle trips attributable to a proposed project. If a proposed project is expected to result in fewer than 50 peak hour vehicle trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (Level 2) are performed to estimate the incremental trips at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show that a proposed project would result in 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, or 200 or more peak hour pedestrian trips traversing a pedestrian element, then further quantified analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrians, vehicular and pedestrian safety, and parking.

LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the numbers of person and vehicle trips by mode expected to be generated by the Proposed Development during the weekday AM, midday, and PM, and Saturday peak hours. These estimates were then compared to the *CEQR Technical Manual* thresholds to determine if a Level 2 screening and/or quantified operational analyses would be warranted.

TRANSPORTATION PLANNING ASSUMPTIONS

Trip generation factors for the Proposed Development are based on information from the *CEQR Technical Manual*, the 2016 *East New York Rezoning FEIS*, trip generation surveys conducted by the New York City Department of Transportation (DOT) in Brooklyn for local retail and medical office uses, and U.S. Census Data, as summarized in **Table H-2**.

Table H-2
Travel Demand Assumptions

Use	Residential				Local Retail				Community Facility – Medical Office			
Total Daily Person Trip	(1) Weekday 8.075 Trips / DU			Saturday 9.60	(1) Weekday 205.00 Trips / KSF			Saturday 240.00	(5) Weekday 76.00 Trips / KSF			Saturday 39.00
Trip Linkage	0%				25%				0%			
Net Daily Person Trip	Weekday 8.075 Trips / DU			Saturday 9.60	Weekday 153.75 Trips / KSF			Saturday 180.00	Weekday 76.00 Trips / KSF			Saturday 39.00
	AM	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**
Temporal	(1)				(1)				(5)			
	10.0%	5.0%	11.0%	8.0%	3.0%	19.0%	10.0%	10.0%	11.0%	13.0%	9.0%	17.0%
Direction	(2)				(2)				(5)			
In	15%	50%	70%	50%	50%	50%	50%	55%	62%	47%	35%	49%
Out	85%	50%	30%	50%	50%	50%	50%	45%	38%	53%	65%	51%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Modal Split	(3)				(4)				(5)			
	AM	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**
Auto	13.0%	13.0%	13.0%	13.0%	11.0%	11.0%	11.0%	11.0%	24.0%	24.0%	24.0%	24.0%
Taxi	1.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	6.0%	6.0%	6.0%	6.0%
Subway	59.0%	59.0%	59.0%	59.0%	3.0%	3.0%	3.0%	3.0%	60.0%	60.0%	60.0%	60.0%
Bus	8.0%	8.0%	8.0%	8.0%	2.0%	2.0%	2.0%	2.0%	9.0%	9.0%	9.0%	9.0%
Walk	19.0%	19.0%	19.0%	19.0%	84.0%	84.0%	84.0%	84.0%	1.0%	1.0%	1.0%	1.0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Vehicle	(2)(3)				(2)				(5)			
Occupancy	Weekday			Saturday	Weekday			Saturday	Weekday			Saturday
Auto	1.12			1.12	2.00			2.00	1.50			1.50
Taxi	1.30			1.30	2.00			2.00	1.50			1.50
Daily Delivery Trip Generation Rate	(1) Weekday 0.06 Delivery Trips / DU			Saturday 0.02	(1) Weekday 0.35 Delivery Trips / KSF			Saturday 0.04	(2) Weekday 0.29 Delivery Trips / KSF			Saturday 0.29
Delivery Temporal	**AM**	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**	**AM**	**MD**	**PM**	**SAT**
	(1)				(1)				(2)			
	12.0%	9.0%	2.0%	9.0%	8.0%	11.0%	2.0%	0.0%	3.0%	11.0%	1.0%	0.0%
Delivery Direction	(1)				(1)				(2)			
In	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Out	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Sources:
(1) 2014 *CEQR Technical Manual*
(2) *East New York Rezoning FEIS* (2016)
(3) U.S. Census American Community Survey (ACS) 2013–2017 Journey-to-Work (JTW) Data for Census tracts 233, 235, 241, 243, 251, 253, 255, 1237
(4) Trip Generation survey conducted by DOT in Brooklyn for local retail use
(5) Trip Generation survey conducted by DOT for medical office use

Residential

The weekday and Saturday daily person trip rate and temporal distribution for the residential component are from the *CEQR Technical Manual*. The directional distribution for all peak hours is from the *East New York Rezoning FEIS*. Journey-to-Work (JTW) data for the 2013–2017 U.S. Census Bureau American Community Survey (ACS) for Brooklyn census tracts 233, 235, 241, 243, 251, 253, 255, and 1237 have been used to estimate the modal splits. The vehicle occupancies are from the 2013–2017 U.S. Census ACS for autos and from the *East New York Rezoning FEIS* for taxis. The daily delivery trip rate and temporal and directional distributions are from the *CEQR Technical Manual*.

Local Retail

The weekday and Saturday daily person trip rate and temporal distribution for the local retail component are from the *CEQR Technical Manual*. In line with accepted City practice, a 25-percent

linked trip credit has been applied to the local trip generation estimates. The directional distribution for all peak hours and vehicle occupancies are from the *East New York Rezoning FEIS*. The modal splits are from trip generation surveys conducted by DOT in Brooklyn. The daily delivery trip rate and temporal and directional distributions are from the *CEQR Technical Manual*.

Community Facility – Medical Office

The weekday and Saturday daily person trip rate, the temporal distribution, the directional distribution, the modal splits, and the vehicle occupancies are from trip generation surveys conducted by DOT in Brooklyn. The daily delivery trip rate and temporal and directional distributions are from the *East New York Rezoning FEIS*.

LEVEL 1 SCREENING RESULTS

Based on the above travel demand assumptions, the estimated project-generated trips during the weekday AM, midday, PM, and Saturday peak hours are summarized below.

As summarized in **Table H-3**, under the No Action condition, the Development Site would generate a total of 457, 371, 444, and 399 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Approximately 84, 80, 81, and 68 vehicle trips would be generated during the same respective peak hours.

Table H-3
No Action Condition—Trip Generation Summary

			Person Trip							Vehicle Trip			
Program	Peak Hour	In/Out	Auto	Taxi	Subway	Railroad	Bus	Walk	Total	Auto	Taxi	Delivery	Total
Residential 305 DU	AM	In	5	0	22	0	3	7	37	4	2	1	7
		Out	27	2	124	0	17	40	210	24	2	1	27
		Total	32	2	146	0	20	47	247	28	4	2	34
	Midday	In	8	1	36	0	5	12	62	7	2	1	10
		Out	8	1	36	0	5	12	62	7	2	1	10
		Total	16	2	72	0	10	24	124	14	4	2	20
	PM	In	25	2	112	0	15	36	190	22	3	0	25
		Out	11	1	48	0	7	15	82	10	3	0	13
		Total	36	3	160	0	22	51	272	32	6	0	38
	Saturday	In	15	1	69	0	9	22	116	13	2	0	15
		Out	15	1	69	0	9	22	116	13	2	0	15
		Total	30	2	138	0	18	44	232	26	4	0	30
Medical Office 25,060 GSF	AM	In	31	8	78	0	12	1	130	21	8	0	29
		Out	19	5	48	0	7	1	80	13	8	0	21
		Total	50	13	126	0	19	2	210	34	16	0	50
	Midday	In	28	7	70	0	10	1	116	19	10	0	29
		Out	31	8	79	0	12	1	131	21	10	0	31
		Total	59	15	149	0	22	2	247	40	20	0	60
	PM	In	14	4	36	0	5	1	60	9	8	0	17
		Out	27	7	67	0	10	1	112	18	8	0	26
		Total	41	11	103	0	15	2	172	27	16	0	43
	Saturday	In	20	5	49	0	7	1	82	13	6	0	19
		Out	20	5	51	0	8	1	85	13	6	0	19
		Total	40	10	100	0	15	2	167	26	12	0	38
Total	AM	In	36	8	100	0	15	8	167	25	10	1	36
		Out	46	7	172	0	24	41	290	37	10	1	48
		Total	82	15	272	0	39	49	457	62	20	2	84
	Midday	In	36	8	106	0	15	13	178	26	12	1	39
		Out	39	9	115	0	17	13	193	28	12	1	41
		Total	75	17	221	0	32	26	371	54	24	2	80
	PM	In	39	6	148	0	20	37	250	31	11	0	42
		Out	38	8	115	0	17	16	194	28	11	0	39
		Total	77	14	263	0	37	53	444	59	22	0	81
	Saturday	In	35	6	118	0	16	23	198	26	8	0	34
		Out	35	6	120	0	17	23	201	26	8	0	34
		Total	70	12	238	0	33	46	399	52	16	0	68

As summarized in **Table H-4**, under the With Action condition, the Development Site would generate a total of 507, 860, 782, and 781 person trips during the weekday AM, midday, PM, and Saturday peak hours, respectively. Approximately 63, 68, 78, and 74 vehicle trips would be generated during the same respective peak hours.

Table H-4
With Action Condition—Trip Generation Summary

Program	Peak Hour	In/Out	Person Trip							Vehicle Trip			
			Auto	Taxi	Subway	Railroad	Bus	Walk	Total	Auto	Taxi	Delivery	Total
Residential 487 DU	AM	In	8	1	35	0	5	11	60	7	3	2	12
		Out	43	3	197	0	27	64	334	38	3	2	43
		Total	51	4	232	0	32	75	394	45	6	4	55
	Midday	In	13	1	58	0	8	19	99	12	2	1	15
		Out	13	1	58	0	8	19	99	12	2	1	15
		Total	26	2	116	0	16	38	198	24	4	2	30
	PM	In	39	3	179	0	24	58	303	35	3	0	38
		Out	17	1	77	0	10	25	130	15	3	0	18
		Total	56	4	256	0	34	83	433	50	6	0	56
	Saturday	In	24	2	110	0	15	36	187	21	4	0	25
		Out	24	2	110	0	15	36	187	21	4	0	25
		Total	48	4	220	0	30	72	374	42	8	0	50
Local Retail 22,272 GSF	AM	In	6	0	2	0	1	43	52	3	0	0	3
		Out	6	0	2	0	1	43	52	3	0	0	3
		Total	12	0	4	0	2	86	104	6	0	0	6
	Midday	In	36	0	10	0	7	273	326	18	0	0	18
		Out	36	0	10	0	7	273	326	18	0	0	18
		Total	72	0	20	0	14	546	652	36	0	0	36
	PM	In	19	0	5	0	3	144	171	10	0	0	10
		Out	19	0	5	0	3	144	171	10	0	0	10
		Total	38	0	10	0	6	288	342	20	0	0	20
	Saturday	In	24	0	7	0	4	185	220	12	0	0	12
		Out	20	0	5	0	4	152	181	10	0	0	10
		Total	44	0	12	0	8	337	401	22	0	0	22
Medical Office 1,134 GSF	AM	In	1	0	4	0	1	0	6	1	0	0	1
		Out	1	0	2	0	0	0	3	1	0	0	1
		Total	2	0	6	0	1	0	7	2	0	0	2
	Midday	In	1	0	3	0	0	0	4	1	0	0	1
		Out	1	0	4	0	1	0	6	1	0	0	1
		Total	2	0	7	0	1	0	10	2	0	0	2
	PM	In	1	0	2	0	0	0	3	1	0	0	1
		Out	1	0	3	0	0	0	4	1	0	0	1
		Total	2	0	5	0	0	0	7	2	0	0	2
	Saturday	In	1	0	2	0	0	0	3	1	0	0	1
		Out	1	0	2	0	0	0	3	1	0	0	1
		Total	2	0	4	0	0	0	6	2	0	0	2
Total	AM	In	15	1	41	0	7	54	118	11	3	2	16
		Out	50	3	201	0	28	107	389	42	3	2	47
		Total	65	4	242	0	35	161	507	53	6	4	63
	Midday	In	50	1	71	0	15	292	429	31	2	1	34
		Out	50	1	72	0	16	292	431	31	2	1	34
		Total	100	2	143	0	31	584	860	62	4	2	68
	PM	In	59	3	186	0	27	202	477	46	3	0	49
		Out	37	1	85	0	13	169	305	26	3	0	29
		Total	96	4	271	0	40	371	782	72	6	0	78
	Saturday	In	49	2	119	0	19	221	410	34	4	0	38
		Out	45	2	117	0	19	188	371	32	4	0	36
		Total	94	4	236	0	38	409	781	66	8	0	74

The net incremental trips generated by the Proposed Development are shown in **Table H-5**. As summarized in **Table H-5**, the overall Saturday peak hour incremental person trips would be within the envelope of the weekday midday peak hour, and the Saturday peak hour incremental vehicle trips would be below the *CEQR Technical Manual* analysis threshold of 50 or more vehicle trips requiring further detailed analysis. Furthermore, as stated in the *CEQR Technical Manual*, weekday analysis peak periods should suffice in assessing potential impacts associated with

residential land uses. The weekday peak periods are also when there would be the highest levels of background activities. Since the Proposed Development would be primarily residential and the aggregate trip generation of its uses would be highest during weekday peak hours, further assessments of Saturday conditions are not warranted. Therefore, the subsequent sections of this attachment discuss only the weekday analysis peak hours.

Table H-5
Trip Generation Summary: Net Incremental Trips

		Person Trip							Vehicle Trip			
Peak Hour	**In/Out**	**Auto**	**Taxi**	**Subway**	**Railroad**	**Bus**	**Walk**	**Total**	**Auto**	**Taxi**	**Delivery**	**Total**
AM	In	-21	-7	-59	0	-8	46	-49	-14	-7	1	-20
	Out	4	-4	29	0	4	66	99	5	-7	1	-1
	Total	-17	-11	-30	0	-4	112	50	-9	-14	2	-21
Midday	In	14	-7	-35	0	0	279	251	5	-10	0	-5
	Out	11	-8	-43	0	-1	279	238	3	-10	0	-7
	Total	25	-15	-78	0	-1	558	489	8	-20	0	-12
PM	In	20	-3	38	0	7	165	227	15	-8	0	7
	Out	-1	-7	-30	0	-4	153	111	-2	-8	0	-10
	Total	19	-10	8	0	3	318	338	13	-16	0	-3
Saturday	In	14	-4	1	0	3	198	212	8	-4	0	4
	Out	10	-4	-3	0	2	165	170	6	-4	0	2
	Total	24	-8	-2	0	5	363	382	14	-8	0	6

Traffic

As shown in **Table H-5**, the incremental vehicle trips generated by the Proposed Development would be -21, -12, and -3 vehicle trips during the weekday AM, midday, and PM peak hours, respectively. Since the incremental vehicle trips would not exceed the *CEQR Technical Manual* analysis threshold of 50 or more vehicles during the weekday AM, midday, and PM peak hours, a detailed traffic analysis is not warranted and the Proposed Development is not expected to result in any significant adverse traffic impacts.

Parking

The *CEQR Technical Manual* states that if a quantified traffic analysis is not required, an assessment of parking supply and utilization is also typically not warranted. Approximately 176 accessory parking spaces are proposed to accommodate some of the parking demand generated by the Proposed Development. Therefore, as a result of the conclusions described above for traffic and the accessory parking spaces provided by the Proposed Development, a parking analysis is not required and the Proposed Development is not expected to result in any significant adverse parking impacts.

Transit

Public transit options to and from the study area are shown in **Figure H-2**. The Development Site is served by the New York City Transit (NYCT) Bedford-Nostrand Avenues (G train) Subway Station and the B38, B44, B44 Select Bus Service (SBS), B48, B54, and other local bus routes in the study area.

As detailed in **Table H-5**, the incremental transit trips generated by the Proposed Development would be -30, -78, and 8 person trips during the weekday AM, midday, and PM peak hours, respectively. The subway trips would not exceed the *CEQR Technical Manual* analysis threshold of 200 or more peak hour subway trips. Therefore, a detailed analysis of subway facilities is not

10.9.19



Project Site

Rezoning Area Boundary

G Train Subway Route and Station

Bus Routes

B38

B44

B48

B52

B54

Study Area Transit

270 NOSTRAND AVENUE

Figure H-2

warranted and the Proposed Development is not expected to result in any significant adverse subway impacts.

Also as shown in **Table H-5**, the incremental bus trips generated by the Proposed Development would be -4, -1, and 3 person trips during the weekday AM, midday, and PM peak hours, respectively. No single bus route would exceed the *CEQR Technical Manual* analysis threshold of 50 or more peak hour bus riders in a single direction. Therefore, a detailed bus line-haul analysis is also not warranted and the Proposed Development is not expected to result in any significant adverse bus line-haul impacts.

Pedestrians

All incremental person trips generated by the Proposed Development would traverse the pedestrian elements (i.e., sidewalks, corners, and crosswalks) surrounding the Development Site, with the exception of residents parking inside the garage. As shown in **Table H-5**, the net incremental pedestrian trips would be greater than 200 during the weekday midday and PM peak hours. A Level 2 screening assessment (presented in the section below) was conducted to determine if there is a need for additional quantified pedestrian analyses.

LEVEL 2 SCREENING ASSESSMENT

As part of the Level 2 screening assessment, project generated trips were assigned to specific pedestrian elements near the Development Site. As discussed above, further quantified analyses to assess the potential impacts of the Proposed Development on the transportation system would be warranted if the trip assignments were to identify key pedestrian elements incurring 200 or more peak hour pedestrian trips.

SITE ACCESS AND EGRESS

The entrance to the residential lobby would be located on Nostrand Avenue under both the No Action and With Action conditions. The local retail entrances under the With Action condition would be located on DeKalb Avenue, Nostrand Avenue, and Kosciuszko Street. The community facility (medical office) entrances under the No Action condition would be located on DeKalb Avenue, Nostrand Avenue, and Kosciuszko Street. The community facility (medical office) entrance under the With Action condition would be located on DeKalb Avenue. The on-site accessory parking facility under both the No Action and With Action conditions would have access to the residential lobby.

PEDESTRIANS

Level 2 pedestrian trip assignments were individually developed for the No Action project generated, With Action project generated, and With Action incremental pedestrian trips. These trip assignments are shown in **Figures H-3 through H-11** and discussed below.

- Auto Trips: Except for the auto trips for the residential use, auto trips were assigned to the Development Site's various curbsides and pedestrians were assumed to walk to the entrances from there.
- Taxi Trips: Taxi patrons would get dropped off and picked up along the Development Site's various frontages
- City Bus Trips: City bus riders would use buses stopping on Bedford Avenue, Franklin Avenue, Classon Avenue, Lafayette Avenue, DeKalb Avenue, Nostrand Avenue, Myrtle Avenue, Tompkins Avenue, and Throop Avenue, and would get off at bus stops nearest to the Development Site.

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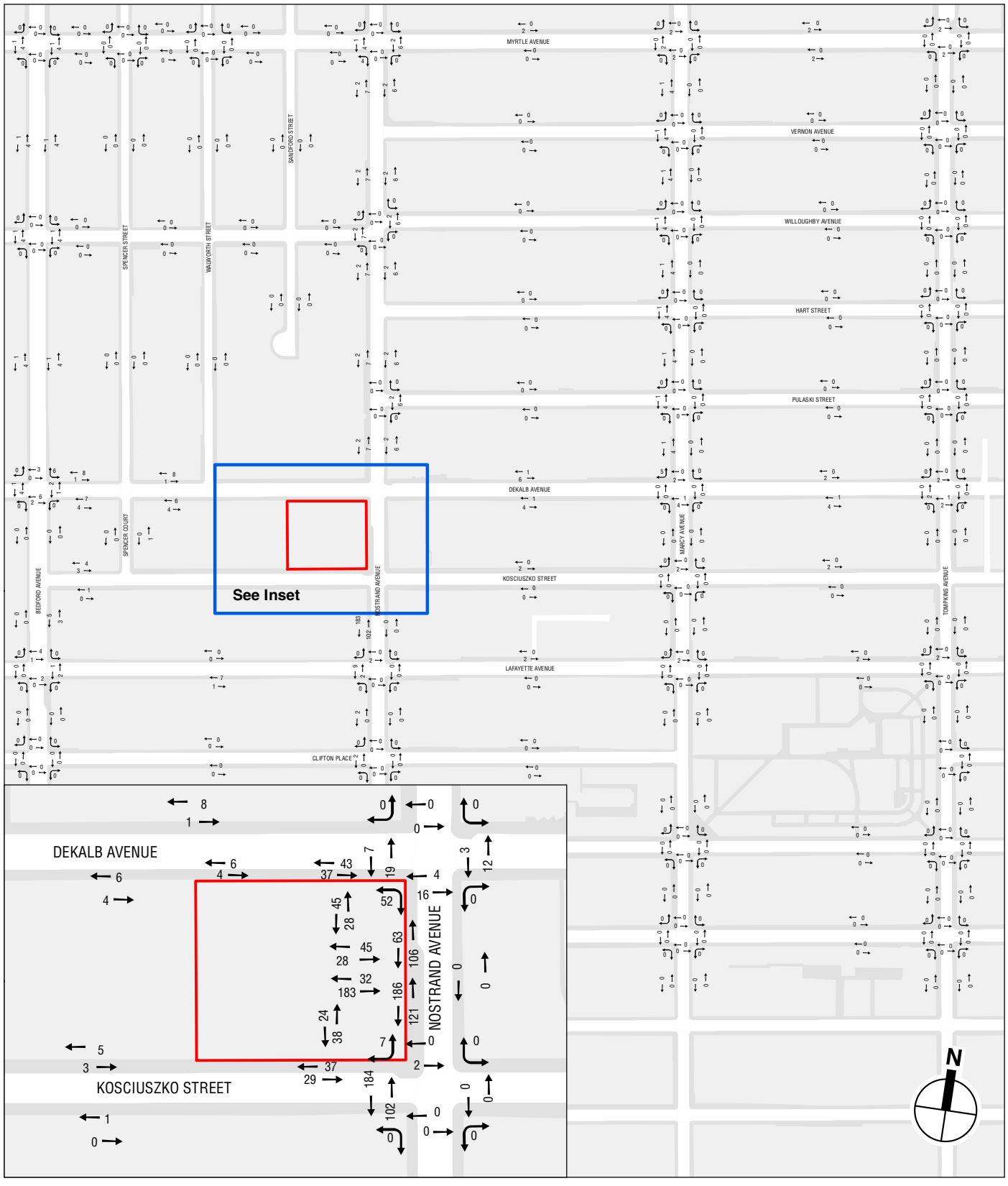


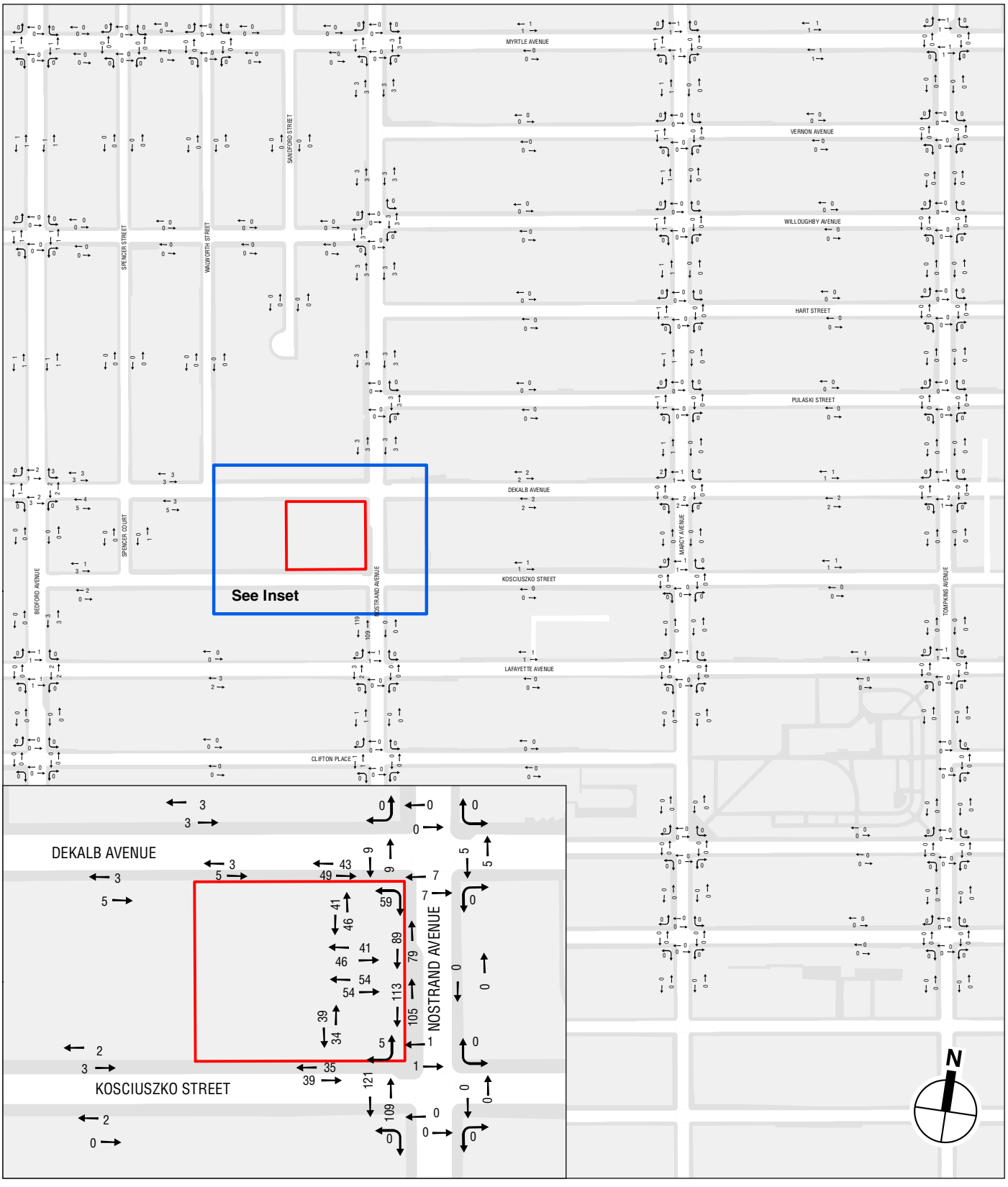
Project Site

0 200 FEET

No Action Project Generated Pedestrian Trips
Weekday AM Peak Hour

270 NOSTRAND AVENUE

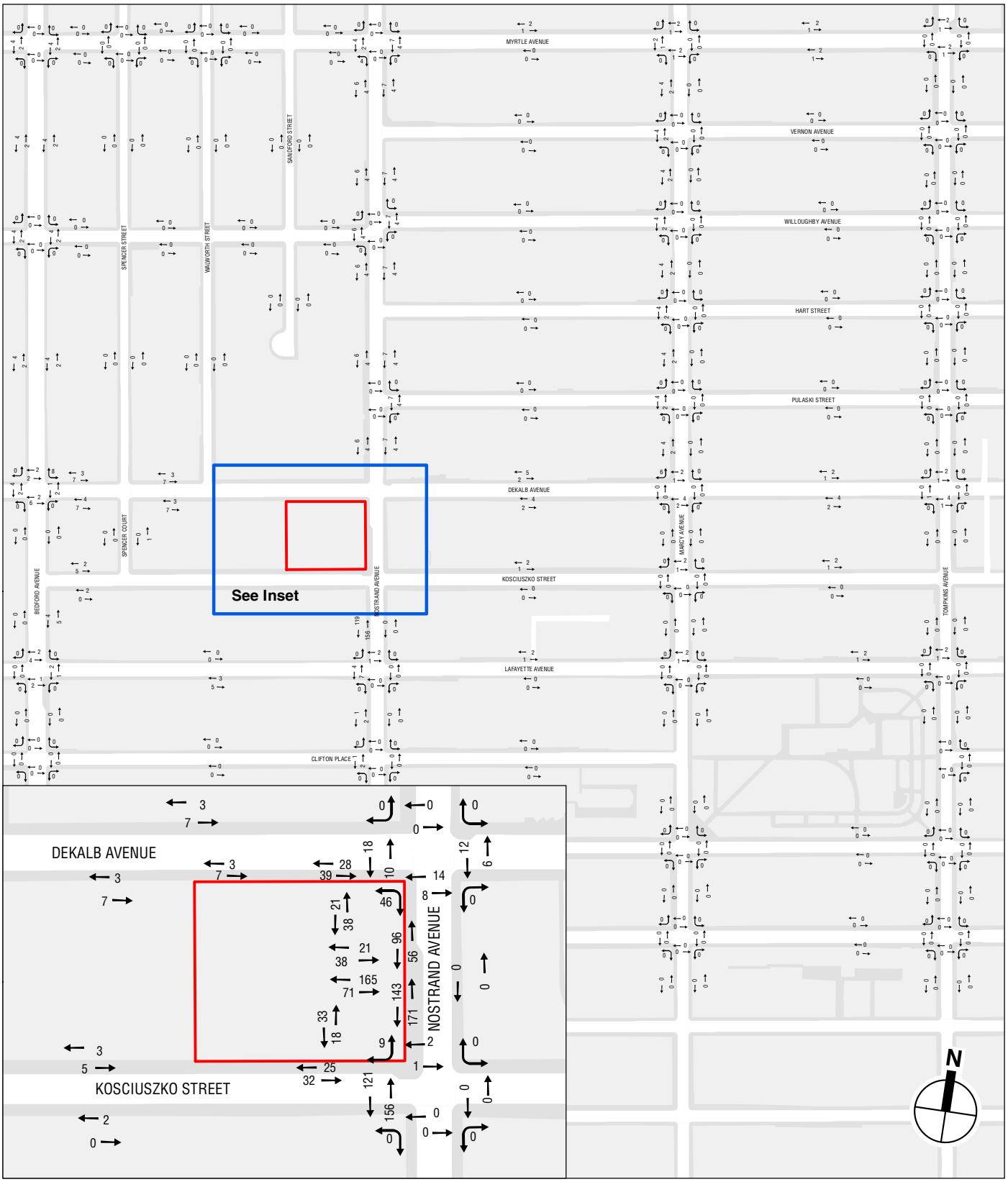
Figure H-3



No Action Project Generated Pedestrian Trips
Weekday Midday Peak Hour

270 NOSTRAND AVENUE

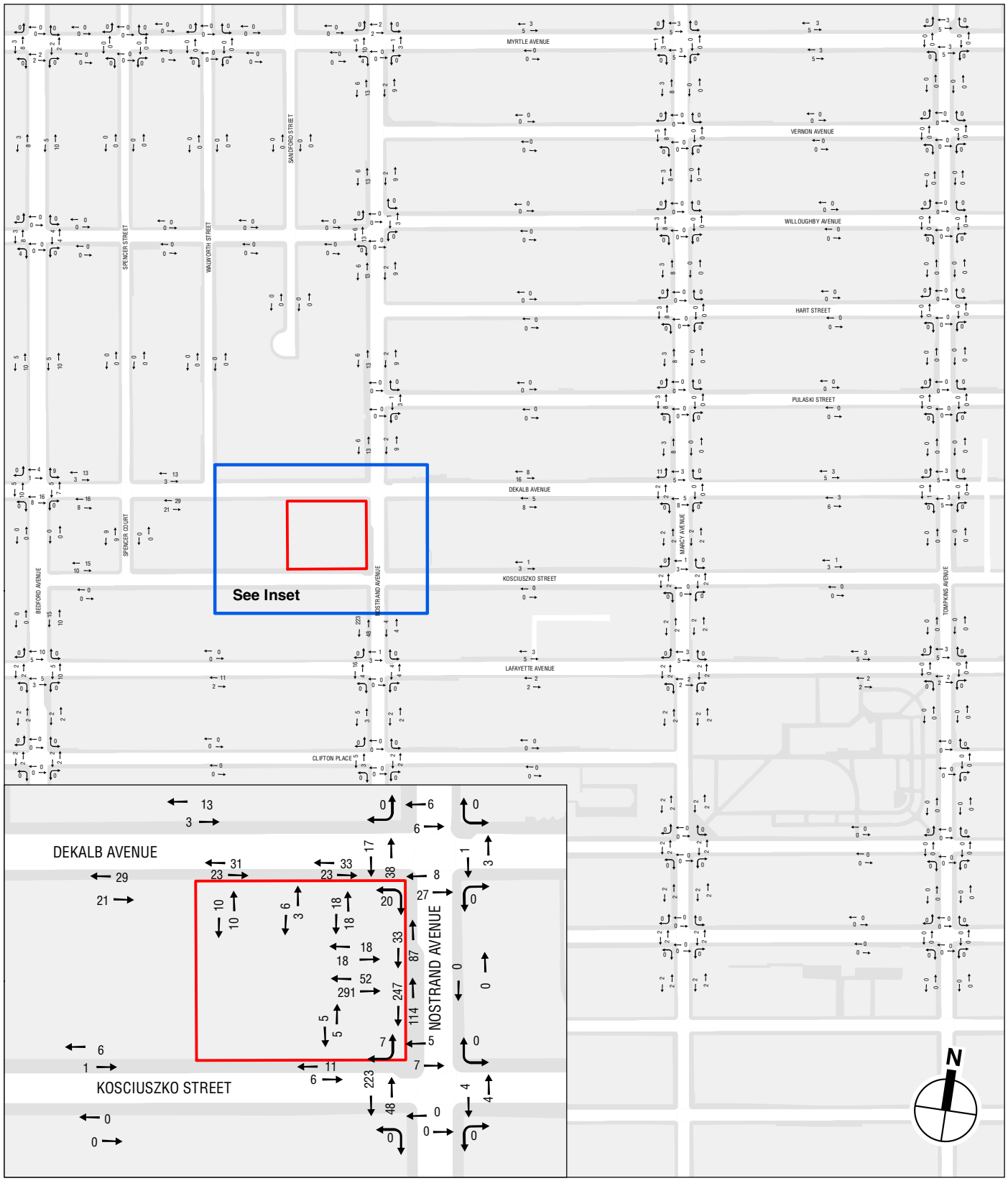
Figure H-4



No Action Project Generated Pedestrian Trips
Weekday PM Peak Hour

270 NOSTRAND AVENUE

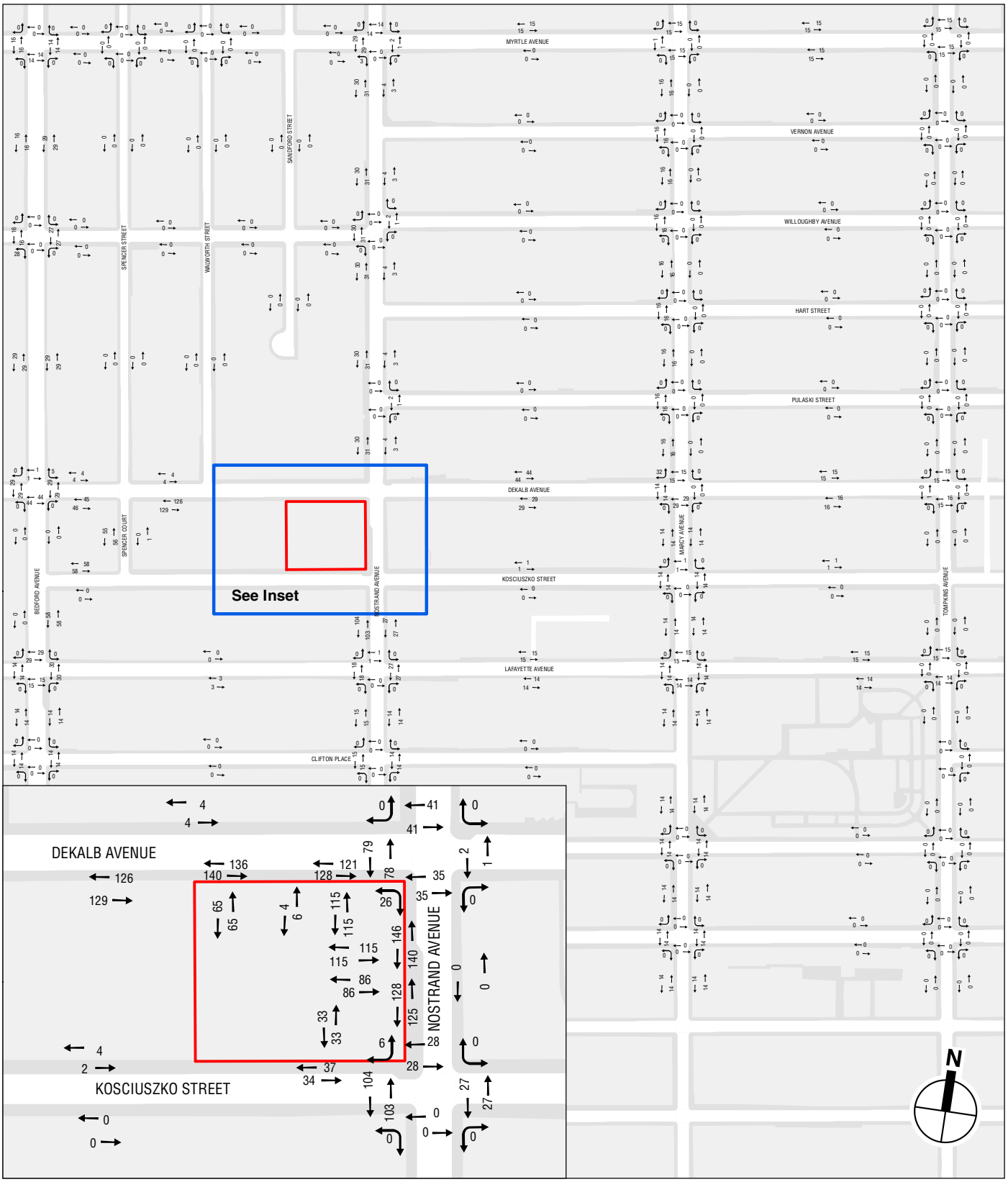
Figure H-5



With Action Project Generated Pedestrian Trips
Weekday AM Peak Hour

270 NOSTRAND AVENUE

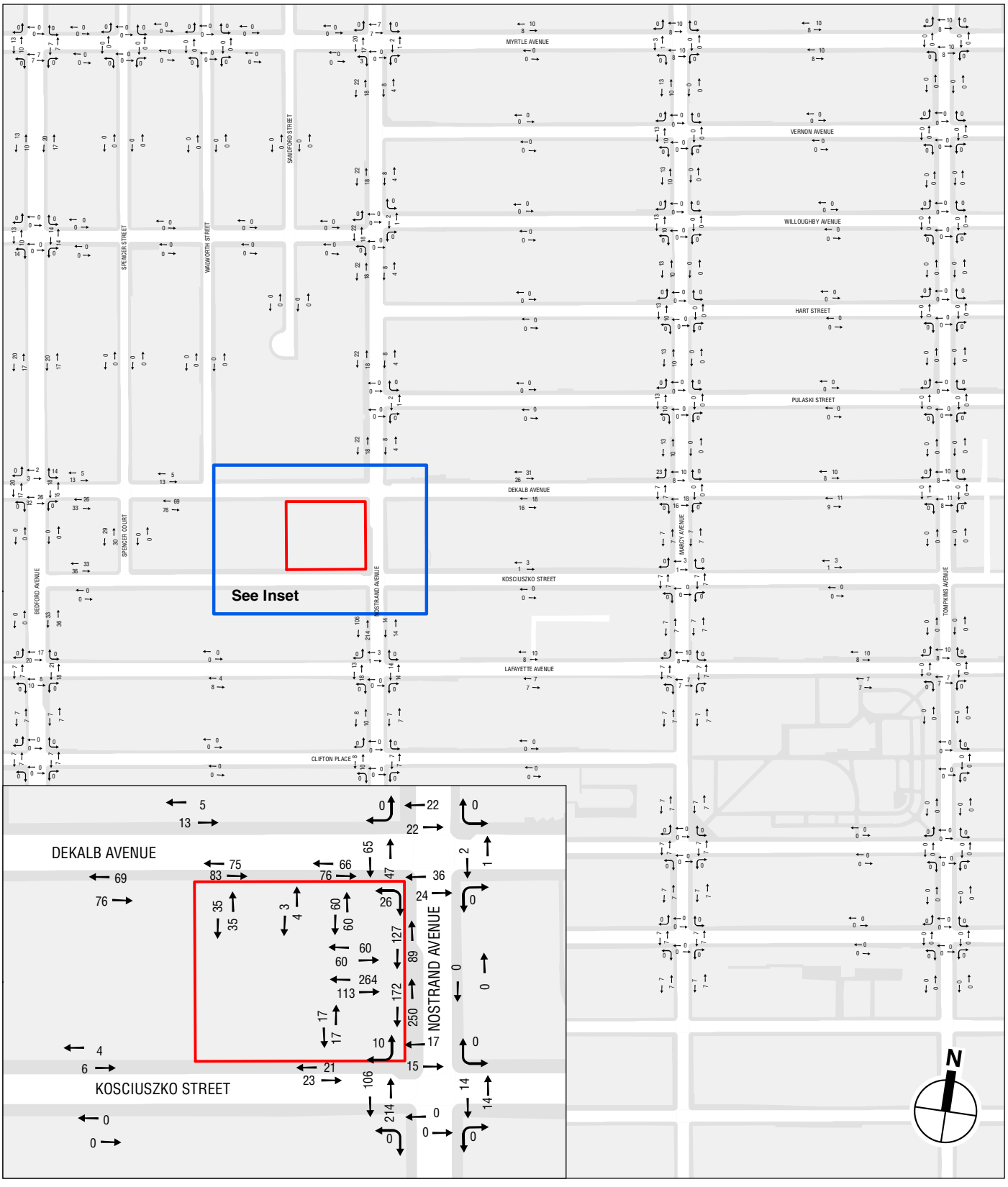
Figure H-6



With Action Project Generated Pedestrian Trips
Weekday Midday Peak Hour

270 NOSTRAND AVENUE

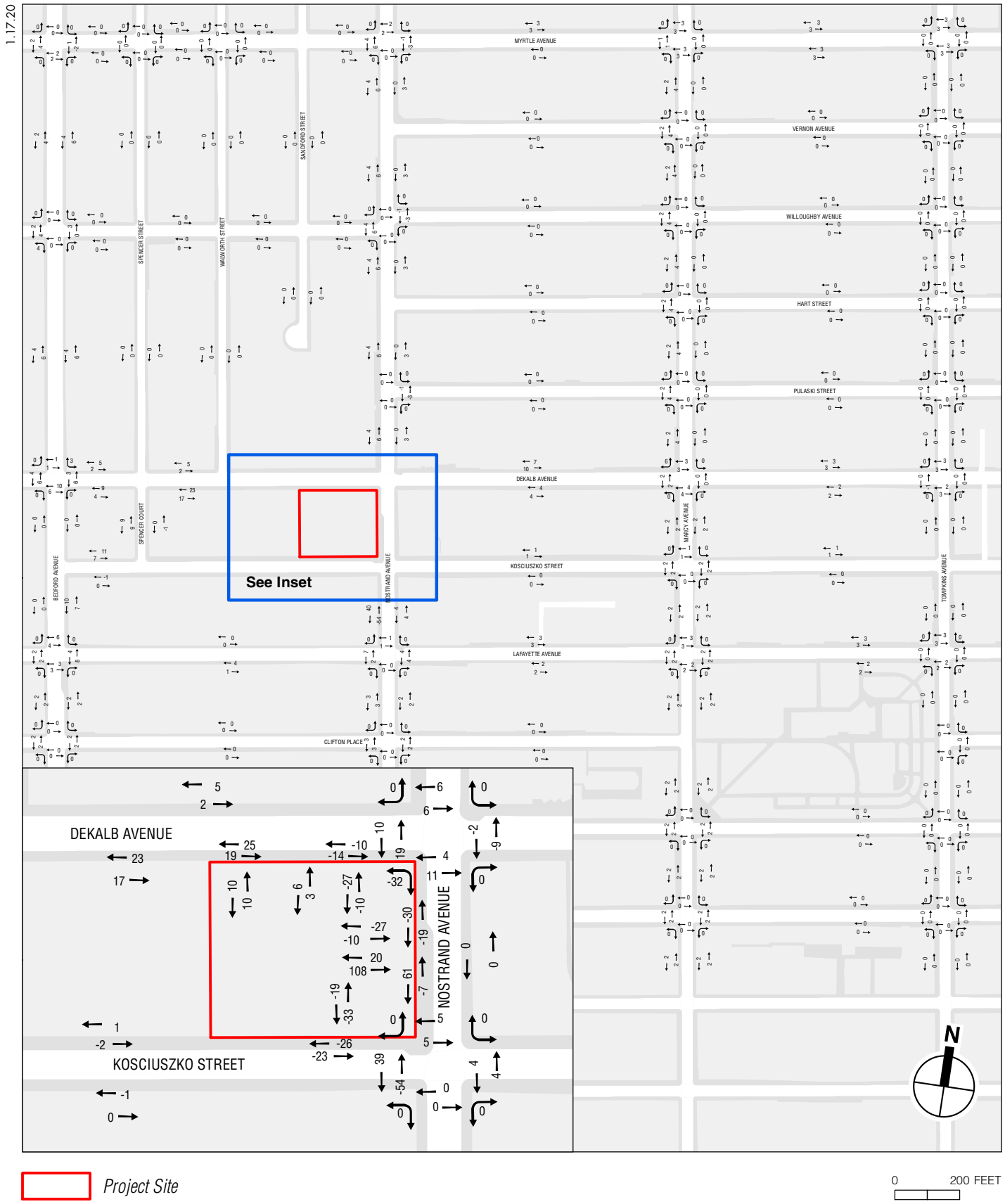
Figure H-7



With Action Project Generated Pedestrian Trips
Weekday PM Peak Hour

270 NOSTRAND AVENUE

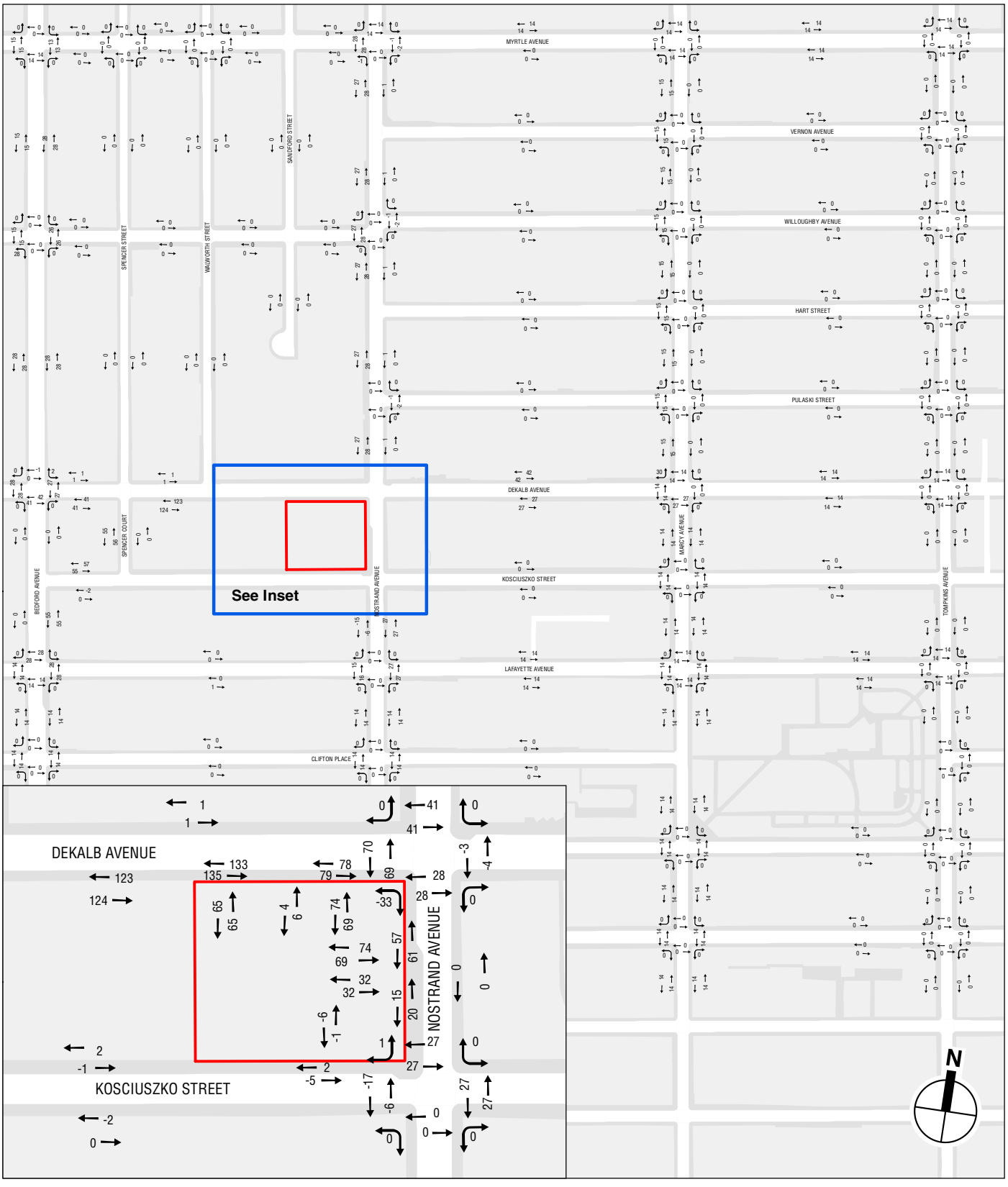
Figure H-8



With Action Incremental Pedestrian Trips
Weekday AM Peak Hour

270 NOSTRAND AVENUE

Figure H-9



With Action Incremental Pedestrian Trips
Weekday Midday Peak Hour

270 NOSTRAND AVENUE

Figure H-10

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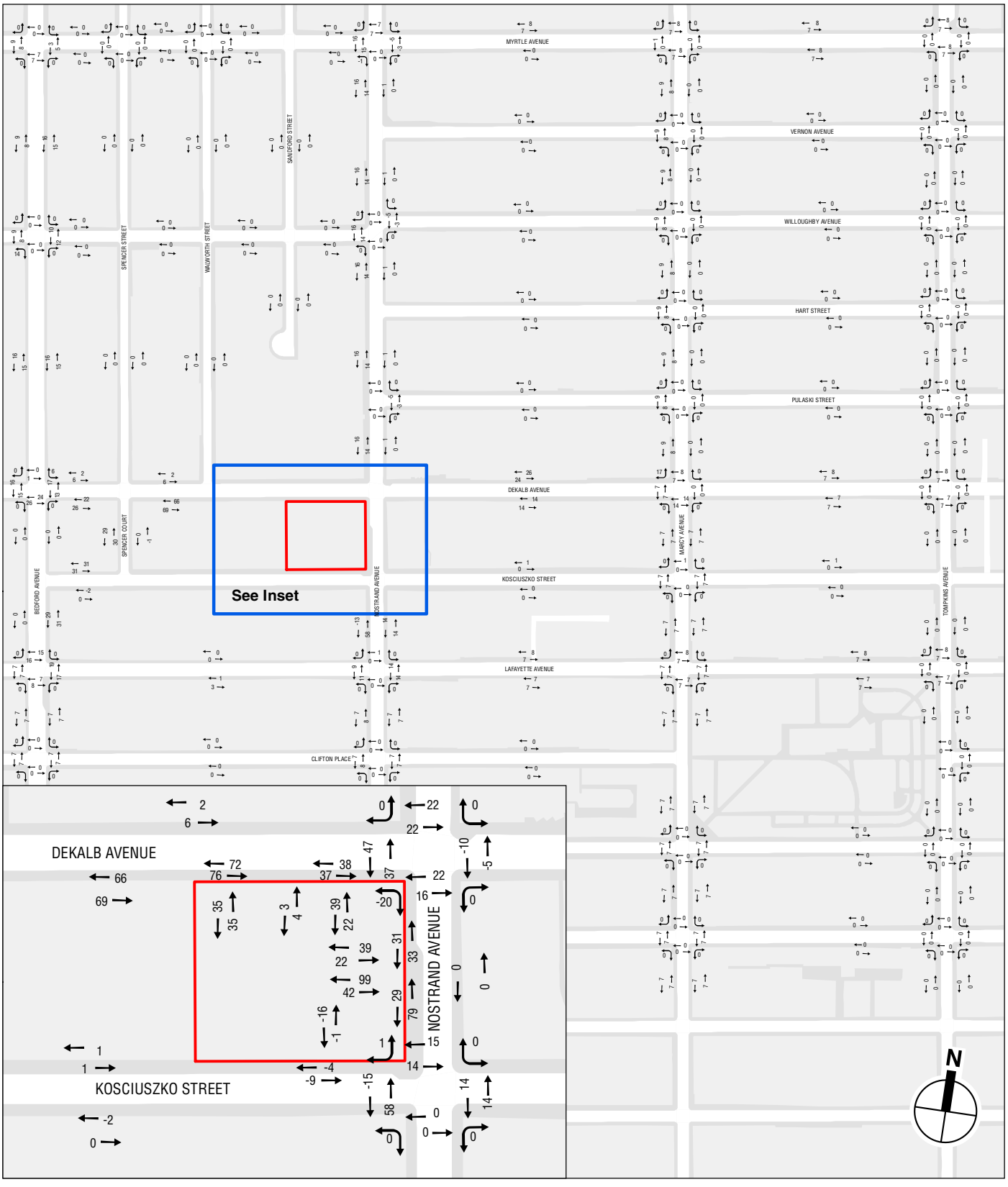

Project Site

0 200 FEET

With Action Incremental Pedestrian Trips
Weekday PM Peak Hour

270 NOSTRAND AVENUE

Figure H-11

- Subway Trips: Subway riders were assigned to the Bedford-Nostrand Avenues Station (G Train) Subway Station.
- Walk-Only Trips: Pedestrian walk-only trips were developed by distributing project generated person trips to surrounding pedestrian facilities (i.e., sidewalks, corner reservoirs, and crosswalks) based on population density data as well as the land use characteristics of the surrounding neighborhood.

According to the *CEQR Technical Manual*, pedestrian elements with 200 or more incremental peak hour person trips as a result of the Proposed Development would have the potential for significant adverse pedestrian impacts and should be assessed in a quantified pedestrian impact analysis. As shown in **Table H-6** below and presented in **Figure H-12**, based on the detailed assignment of pedestrian trips, two sidewalks and one corner have been selected for detailed pedestrian analyses.

Table H-6
Pedestrians – Level 2 Screening Assessment Results

Pedestrian Elements	Incremental Pedestrian Trips			Selected Analysis Location
	Weekday AM	Weekday Midday	Weekday PM	
Bedford Avenue and DeKalb Avenue				
Southeast Corner	25	137	80	
Southwest Corner	26	139	81	
Spencer Street/Spencer Court and DeKalb Avenue				
Southeast sidewalk along DeKalb Avenue between Spencer Street/Spencer court and Walworth Street	40	**247**	135	✓
Southwest sidewalk along Spencer Court between DeKalb Avenue and Kosciuszko Street	18	111	59	
Nostrand Avenue and DeKalb Avenue				
West Crosswalk	29	139	84	
Southwest Corner	12	162	102	
Northwest Corner	41	**221**	128	✓
Southwest sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue at westernmost site retail entrance	44	**268**	148	✓
Southwest sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue at easternmost site retail entrance	-24	157	75	
Southwest sidewalk along Nostrand Avenue between DeKalb Avenue and Kosciuszko Street	-49	118	64	
Bedford Avenue and Kosciuszko Street				
Northeast sidewalk along Kosciuszko Street between Bedford Avenue and Spencer Court	18	112	72	
Southeast sidewalk along Bedford Avenue between Kosciuszko Street and Lafayette Avenue	17	110	70	
Nostrand Avenue and Kosciuszko Street				
Northwest sidewalk along Nostrand Avenue between DeKalb Avenue and Kosciuszko Street	54	35	108	
Northeast Corner	18	108	57	
Bedford Avenue and Lafayette Avenue				
Northeast Corner	22	112	67	

Notes: Elements with 100 or greater incremental pedestrian trips in a peak hour are shown in this table.
✓ Denotes pedestrian elements selected for detailed analysis

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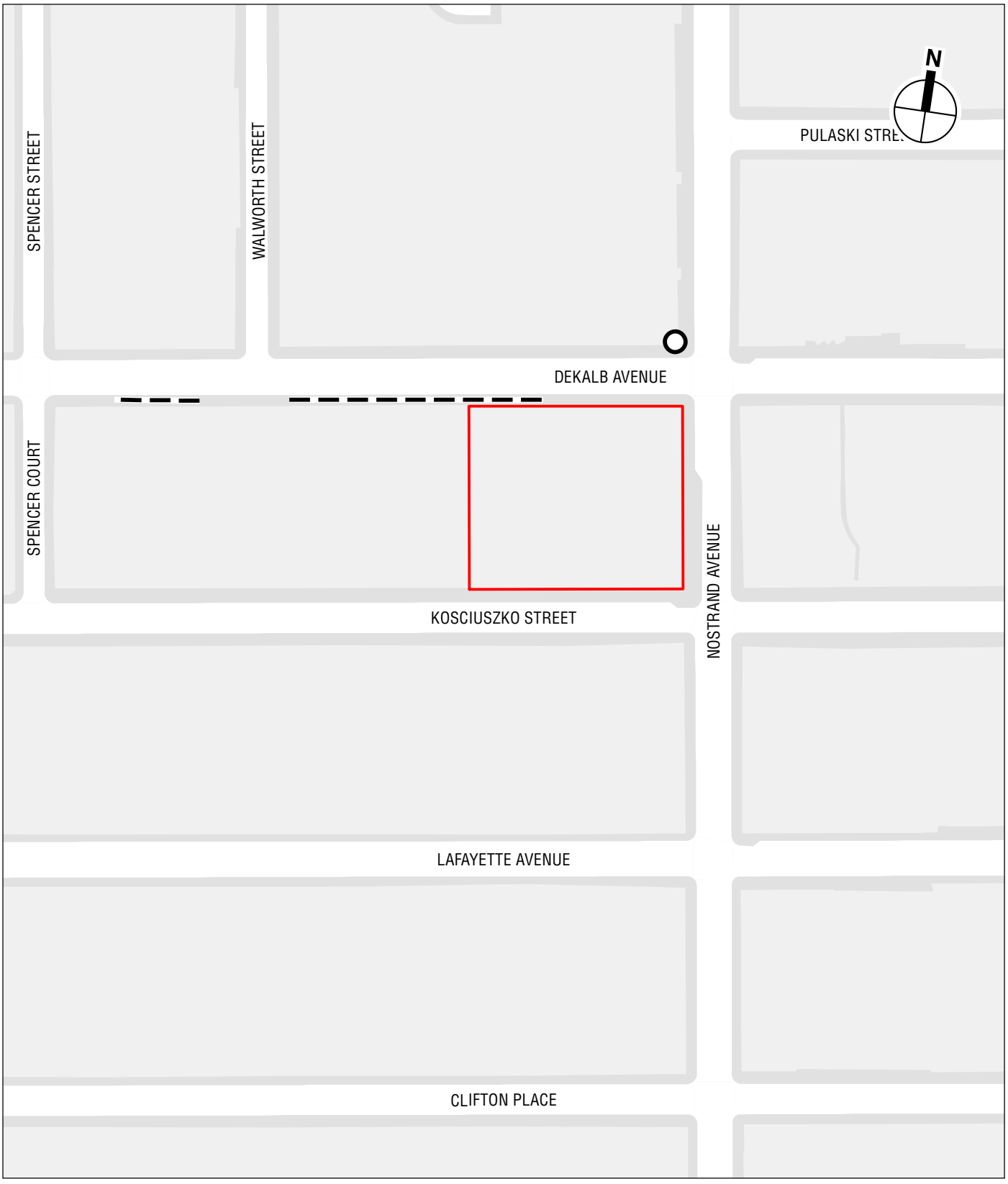


Project Site

Pedestrian Analysis Location - Corner

Pedestrian Analysis Location - Sidewalk

0 200 FEET

Pedestrian Analysis Locations

270 NOSTRAND AVENUE

Figure H-12

C. TRANSPORTATION ANALYSIS METHODOLOGIES

PEDESTRIAN OPERATIONS

The adequacy of the study area's sidewalks, crosswalks, and corner reservoir capacities in relation to the demand imposed on them is evaluated based on the methodologies presented in the 2010 *HCM* and procedures detailed in the *CEQR Technical Manual*.

The primary performance measure for sidewalks and walkways is pedestrian space, expressed as square feet per pedestrian (SFP), which is an indicator of the quality of pedestrian movement and comfort. The calculation of the sidewalk SFP is based on the pedestrian volumes by direction, the effective sidewalk or walkway width, and average walking speed. The SFP forms the basis for a sidewalk level of service (LOS) analysis. The determination of sidewalk LOS is also dependent on whether the pedestrian flow being analyzed is best described as "non-platoon" or "platoon." Non-platoon flow occurs when pedestrian volume within the peak 15-minute period is relatively uniform, whereas, platoon flow occurs when pedestrian volumes vary significantly with the peak 15-minute period. Such variation typically occurs near bus stops, subway stations, and/or where adjacent crosswalks account for much of the walkway's pedestrian volume.

Street corners are not easily measured in terms of free pedestrian flow, as they are influenced by the effects of traffic signals. Street corners must be able to provide sufficient space for a mix of standing pedestrians (queued to cross a street) and circulating pedestrians (crossing the street or moving around the corner). The *HCM* methodologies apply a measure of time and space availability based on the area of the corner, the timing of the intersection signal, and the estimated space used by circulating pedestrians. The total "time-space" available for these activities, expressed in square feet-second, is calculated by multiplying the net area of the corner (in square feet) by the signal's cycle length. The analysis then determines the total circulation time for all pedestrian movements at the corner per signal cycle (expressed as pedestrians per second). The ratio of net time-space divided by the total pedestrian circulation volume per signal cycle provides the LOS measurement of SFP. The LOS standards for sidewalks and corner reservoirs are summarized in **Table H-7**.

Table H-7
Level of Service Criteria for Pedestrian Elements

LOS	Sidewalks		Corner Reservoirs
	Non-Platoon Flow	Platoon Flow	
A	> 60 SFP	> 530 SFP	> 60 SFP
B	> 40 and ≤ 60 SFP	> 90 and ≤ 530 SFP	> 40 and ≤ 60 SFP
C	> 24 and ≤ 40 SFP	> 40 and ≤ 90 SFP	> 24 and ≤ 40 SFP
D	> 15 and ≤ 24 SFP	> 23 and ≤ 40 SFP	> 15 and ≤ 24 SFP
E	> 8 and ≤ 15 SFP	> 11 and ≤ 23 SFP	> 8 and ≤ 15 SFP
F	≤ 8 SFP	≤ 11 SFP	≤ 8 SFP

Note: SFP = square feet per pedestrian.
Source: New York City Mayor's Office of Environmental Coordination, *CEQR Technical Manual*

The *CEQR Technical Manual* specifies acceptable LOS in Central Business District (CBD) areas is mid-LOS D or better. CBD areas include most of Manhattan, Downtown Brooklyn, Long Island City, and downtown Jamaica; CBDs generally have a substantially higher level of pedestrian activity than other non-CBD areas of New York City. As a result, pedestrians in CBD areas have become acclimated to, and tolerant of, restricted level of service conditions that might not be considered acceptable elsewhere.

SIGNIFICANT IMPACT CRITERIA

The determination of significant pedestrian impacts considers the level of predicted decrease in pedestrian space between the No Action and With Action conditions. For different pedestrian elements, flow conditions, and area types, the CEQR procedure for impact determination corresponds with various sliding-scale formulas, as further detailed below.

Sidewalks

There are two sliding-scale formulas for determining significant sidewalk impacts. For non-platoon flow, the determination of significant sidewalk impacts is based on the sliding scale using the following formula: $Y \geq X/9.0 - 0.31$, where Y is the decrease in pedestrian space in SFP and X is the No Action pedestrian space in SFP. For platoon flow, the sliding-scale formula is $Y \geq X/(9.5 - 0.321)$. Since a decrease in pedestrian space within acceptable levels would not constitute a significant impact, these formulas would apply only if the With Action pedestrian space falls short of LOS C in non-CBD areas or mid-LOS D in CBD areas. **Table H-8** summarizes the sliding scale guidance provided by the *CEQR Technical Manual* for determining potential significant sidewalk impacts.

Table H-8
Significant Impact Guidance for Sidewalks

Non-Platoon Flow				Platoon Flow			
Sliding Scale Formula: *Y ≥ X/9.0 – 0.31*				Sliding Scale Formula: *Y ≥ X/(9.5 – 0.321)*			
Non-CBD Areas		CBD Areas		Non-CBD Areas		CBD Areas	
No Action Ped. Space (X, SFP)	With Action Ped. Space Reduc. (Y, SFP)	No Action Ped. Space (X, SFP)	With Action Ped. Space Reduc. (Y, SFP)	No Action Ped. Space (X, SFP)	With Action Ped. Space Reduc. (Y, SFP)	No Action Ped. Space (X, SFP)	With Action Ped. Space Reduc. (Y, SFP)
–	–	–	–	43.5 to 44.3	≥ 4.3	–	–
–	–	–	–	42.5 to 43.4	≥ 4.2	–	–
–	–	–	–	41.6 to 42.4	≥ 4.1	–	–
–	–	–	–	40.6 to 41.5	≥ 4.0	–	–
–	–	–	–	39.7 to 40.5	≥ 3.9	–	–
–	–	–	–	38.7 to 39.6	≥ 3.8	38.7 to 39.2	≥ 3.8
–	–	–	–	37.8 to 38.6	≥ 3.7	37.8 to 38.6	≥ 3.7
–	–	–	–	36.8 to 37.7	≥ 3.6	36.8 to 37.7	≥ 3.6
–	–	–	–	35.9 to 36.7	≥ 3.5	35.9 to 36.7	≥ 3.5
–	–	–	–	34.9 to 35.8	≥ 3.4	34.9 to 35.8	≥ 3.4
–	–	–	–	34.0 to 34.8	≥ 3.3	34.0 to 34.8	≥ 3.3
–	–	–	–	33.0 to 33.9	≥ 3.2	33.0 to 33.9	≥ 3.2
–	–	–	–	32.1 to 32.9	≥ 3.1	32.1 to 32.9	≥ 3.1
–	–	–	–	31.1 to 32.0	≥ 3.0	31.1 to 32.0	≥ 3.0
–	–	–	–	30.2 to 31.0	≥ 2.9	30.2 to 31.0	≥ 2.9
–	–	–	–	29.2 to 30.1	≥ 2.8	29.2 to 30.1	≥ 2.8
25.8 to 26.6	≥ 2.6	–	–	28.3 to 29.1	≥ 2.7	28.3 to 29.1	≥ 2.7
24.9 to 25.7	≥ 2.5	–	–	27.3 to 28.2	≥ 2.6	27.3 to 28.2	≥ 2.6
24.0 to 24.8	≥ 2.4	–	–	26.4 to 27.2	≥ 2.5	26.4 to 27.2	≥ 2.5
23.1 to 23.9	≥ 2.3	–	–	25.4 to 26.3	≥ 2.4	25.4 to 26.3	≥ 2.4
22.2 to 23.0	≥ 2.2	–	–	24.5 to 25.3	≥ 2.3	24.5 to 25.3	≥ 2.3
21.3 to 22.1	≥ 2.1	21.3 to 21.5	≥ 2.1	23.5 to 24.4	≥ 2.2	23.5 to 24.4	≥ 2.2
20.4 to 21.2	≥ 2.0	20.4 to 21.2	≥ 2.0	22.6 to 23.4	≥ 2.1	22.6 to 23.4	≥ 2.1
19.5 to 20.3	≥ 1.9	19.5 to 20.3	≥ 1.9	21.6 to 22.5	≥ 2.0	21.6 to 22.5	≥ 2.0
18.6 to 19.4	≥ 1.8	18.6 to 19.4	≥ 1.8	20.7 to 21.5	≥ 1.9	20.7 to 21.5	≥ 1.9
17.7 to 18.5	≥ 1.7	17.7 to 18.5	≥ 1.7	19.7 to 20.6	≥ 1.8	19.7 to 20.6	≥ 1.8
16.8 to 17.6	≥ 1.6	16.8 to 17.6	≥ 1.6	18.8 to 19.6	≥ 1.7	18.8 to 19.6	≥ 1.7
15.9 to 16.7	≥ 1.5	15.9 to 16.7	≥ 1.5	17.8 to 18.7	≥ 1.6	17.8 to 18.7	≥ 1.6
15.0 to 15.8	≥ 1.4	15.0 to 15.8	≥ 1.4	16.9 to 17.7	≥ 1.5	16.9 to 17.7	≥ 1.5
14.1 to 14.9	≥ 1.3	14.1 to 14.9	≥ 1.3	15.9 to 16.8	≥ 1.4	15.9 to 16.8	≥ 1.4
13.2 to 14.0	≥ 1.2	13.2 to 14.0	≥ 1.2	15.0 to 15.8	≥ 1.3	15.0 to 15.8	≥ 1.3
12.3 to 13.1	≥ 1.1	12.3 to 13.1	≥ 1.1	14.0 to 14.9	≥ 1.2	14.0 to 14.9	≥ 1.2
11.4 to 12.2	≥ 1.0	11.4 to 12.2	≥ 1.0	13.1 to 13.9	≥ 1.1	13.1 to 13.9	≥ 1.1
10.5 to 11.3	≥ 0.9	10.5 to 11.3	≥ 0.9	12.1 to 13.0	≥ 1.0	12.1 to 13.0	≥ 1.0
9.6 to 10.4	≥ 0.8	9.6 to 10.4	≥ 0.8	11.2 to 12.0	≥ 0.9	11.2 to 12.0	≥ 0.9
8.7 to 9.5	≥ 0.7	8.7 to 9.5	≥ 0.7	10.2 to 11.1	≥ 0.8	10.2 to 11.1	≥ 0.8
7.8 to 8.6	≥ 0.6	7.8 to 8.6	≥ 0.6	9.3 to 10.1	≥ 0.7	9.3 to 10.1	≥ 0.7
6.9 to 7.7	≥ 0.5	6.9 to 7.7	≥ 0.5	8.3 to 9.2	≥ 0.6	8.3 to 9.2	≥ 0.6
6.0 to 6.8	≥ 0.4	6.0 to 6.8	≥ 0.4	7.4 to 8.2	≥ 0.5	7.4 to 8.2	≥ 0.5
5.1 to 5.9	≥ 0.3	5.1 to 5.9	≥ 0.3	6.4 to 7.3	≥ 0.4	6.4 to 7.3	≥ 0.4
< 5.1	≥ 0.2	< 5.1	≥ 0.2	< 6.4	≥ 0.3	< 6.4	≥ 0.3

Notes: SFP = square feet per pedestrian; Y = decrease in pedestrian space in SFP; X = No Action pedestrian space in SFP.
Sources: New York City Mayor's Office of Environmental Coordination, *CEQR Technical Manual*.

Corner Reservoirs

The determination of significant corner impacts is also based on a sliding scale using the following formula: $Y \geq X/9.0 - 0.31$, where Y is the decrease in pedestrian space in SFP and X is the No Action pedestrian space in SFP. Since a decrease in pedestrian space within acceptable levels would not constitute a significant impact, this formula would apply only if the With Action pedestrian space falls short of LOS C in non-CBD areas or mid-LOS D in CBD areas. **Table H-9** summarizes the sliding scale guidance provided by the *CEQR Technical Manual* for determining potential significant corner reservoir impacts.

Table H-9
Significant Impact Guidance for Corners

Sliding Scale Formula: *Y ≥ X/9.0 – 0.31*			
Non-CBD Areas		CBD Areas	
No Action Pedestrian Space (X, SFP)	With Action Pedestrian Space Reduction (Y, SFP)	No Action Pedestrian Space (X, SFP)	With Action Pedestrian Space Reduction (Y, SFP)
25.8 to 26.6	≥ 2.6	–	–
24.9 to 25.7	≥ 2.5	–	–
24.0 to 24.8	≥ 2.4	–	–
23.1 to 23.9	≥ 2.3	–	–
22.2 to 23.0	≥ 2.2	–	–
21.3 to 22.1	≥ 2.1	21.3 to 21.5	≥ 2.1
20.4 to 21.2	≥ 2.0	20.4 to 21.2	≥ 2.0
19.5 to 20.3	≥ 1.9	19.5 to 20.3	≥ 1.9
18.6 to 19.4	≥ 1.8	18.6 to 19.4	≥ 1.8
17.7 to 18.5	≥ 1.7	17.7 to 18.5	≥ 1.7
16.8 to 17.6	≥ 1.6	16.8 to 17.6	≥ 1.6
15.9 to 16.7	≥ 1.5	15.9 to 16.7	≥ 1.5
15.0 to 15.8	≥ 1.4	15.0 to 15.8	≥ 1.4
14.1 to 14.9	≥ 1.3	14.1 to 14.9	≥ 1.3
13.2 to 14.0	≥ 1.2	13.2 to 14.0	≥ 1.2
12.3 to 13.1	≥ 1.1	12.3 to 13.1	≥ 1.1
11.4 to 12.2	≥ 1.0	11.4 to 12.2	≥ 1.0
10.5 to 11.3	≥ 0.9	10.5 to 11.3	≥ 0.9
9.6 to 10.4	≥ 0.8	9.6 to 10.4	≥ 0.8
8.7 to 9.5	≥ 0.7	8.7 to 9.5	≥ 0.7
7.8 to 8.6	≥ 0.6	7.8 to 8.6	≥ 0.6
6.9 to 7.7	≥ 0.5	6.9 to 7.7	≥ 0.5
6.0 to 6.8	≥ 0.4	6.0 to 6.8	≥ 0.4
5.1 to 5.9	≥ 0.3	5.1 to 5.9	≥ 0.3
< 5.1	≥ 0.2	< 5.1	≥ 0.2

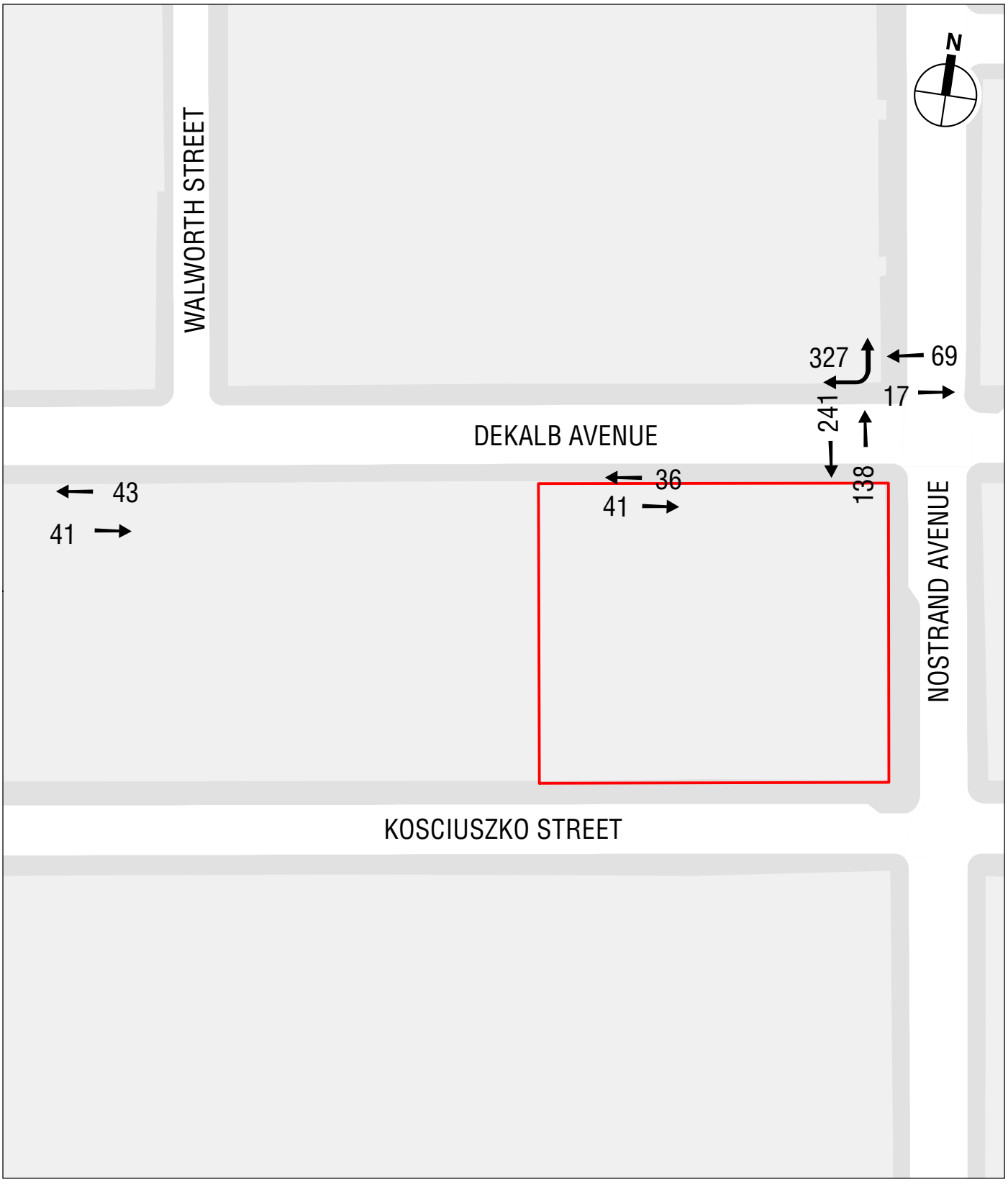
Notes: SFP = square feet per pedestrian; Y = decrease in pedestrian space in SFP; X = No Action pedestrian space in SFP.
Sources: New York City Mayor's Office of Environmental Coordination, 2014 *CEQR Technical Manual*

D. DETAILED PEDESTRIAN ANALYSIS

As described above in Section B, "Transportation Screening Assessments," Level 1 and Level 2 screening analyses were prepared to identify the pedestrian elements warranted a detailed analysis. Based on the assignment of pedestrian trips, two sidewalks and one corner were selected for analysis for the weekday AM, midday, and PM peak hours.

EXISTING CONDITIONS

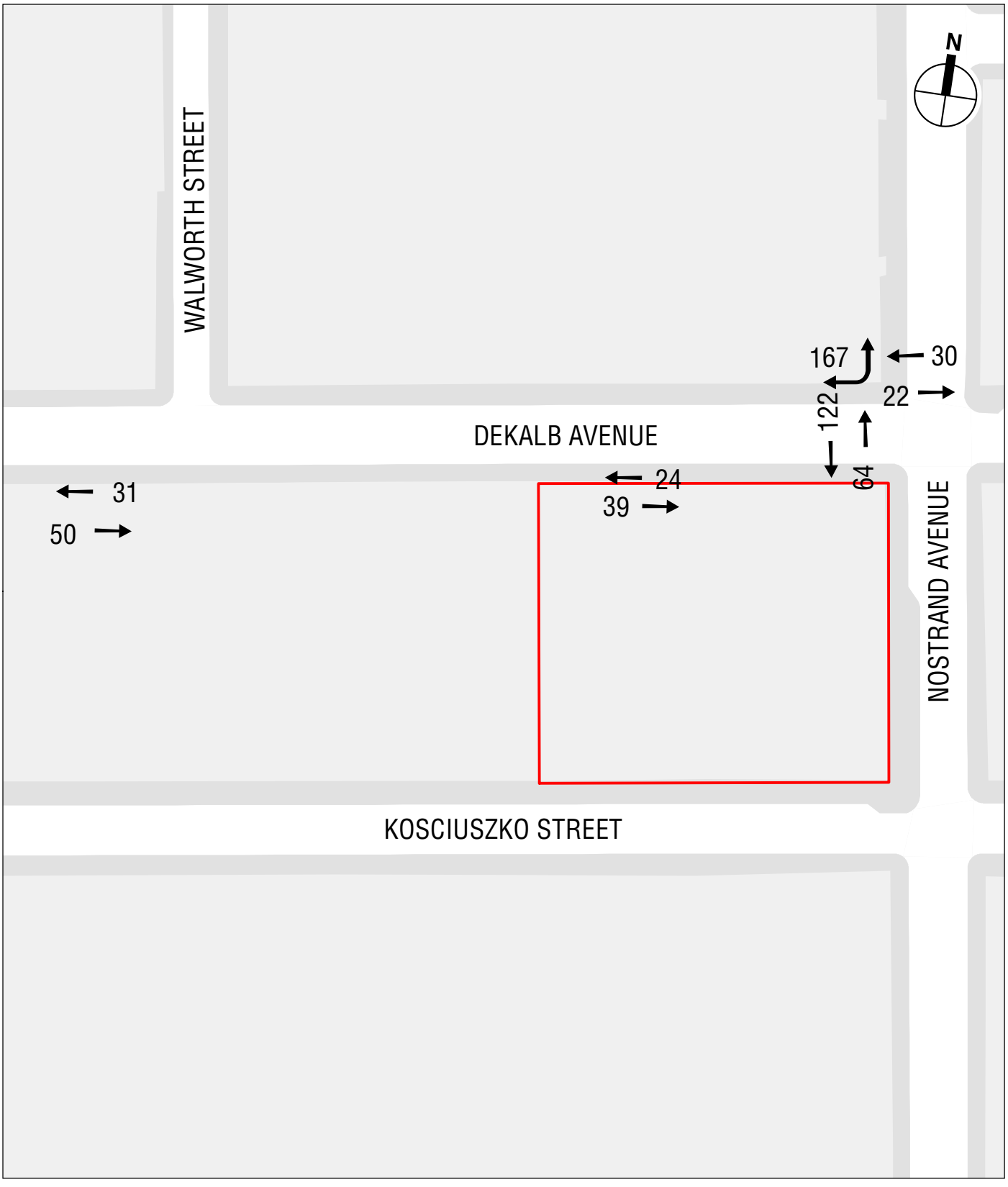
Pedestrian data were collected in November 2019 in accordance with procedures outlined in the *CEQR Technical Manual* during the weekday hours of 7:00 AM to 10:00 AM, 11:00 AM to 2:00 PM, and 4:00 PM to 7:00 PM. Peak hours were determined by comparing rolling hourly averages and the highest 15-minute volumes within the selected peak hours were used to calculate each analysis location's peak hour factor. The existing pedestrian analysis peak hours were determined to be 7:30 AM to 8:30 AM, 12:30 PM to 1:30 PM, and 5:00 PM to 6:00 PM on a weekday. The existing peak hour pedestrian volumes are shown in **Figures H-13 through H-15**. As shown in **Tables H-10 and H-11**, all sidewalk and corner reservoir analysis locations currently operate at favorable LOS B or better.



2019 Existing Pedestrian Volumes
Weekday AM Peak Hour

270 NOSTRAND AVENUE

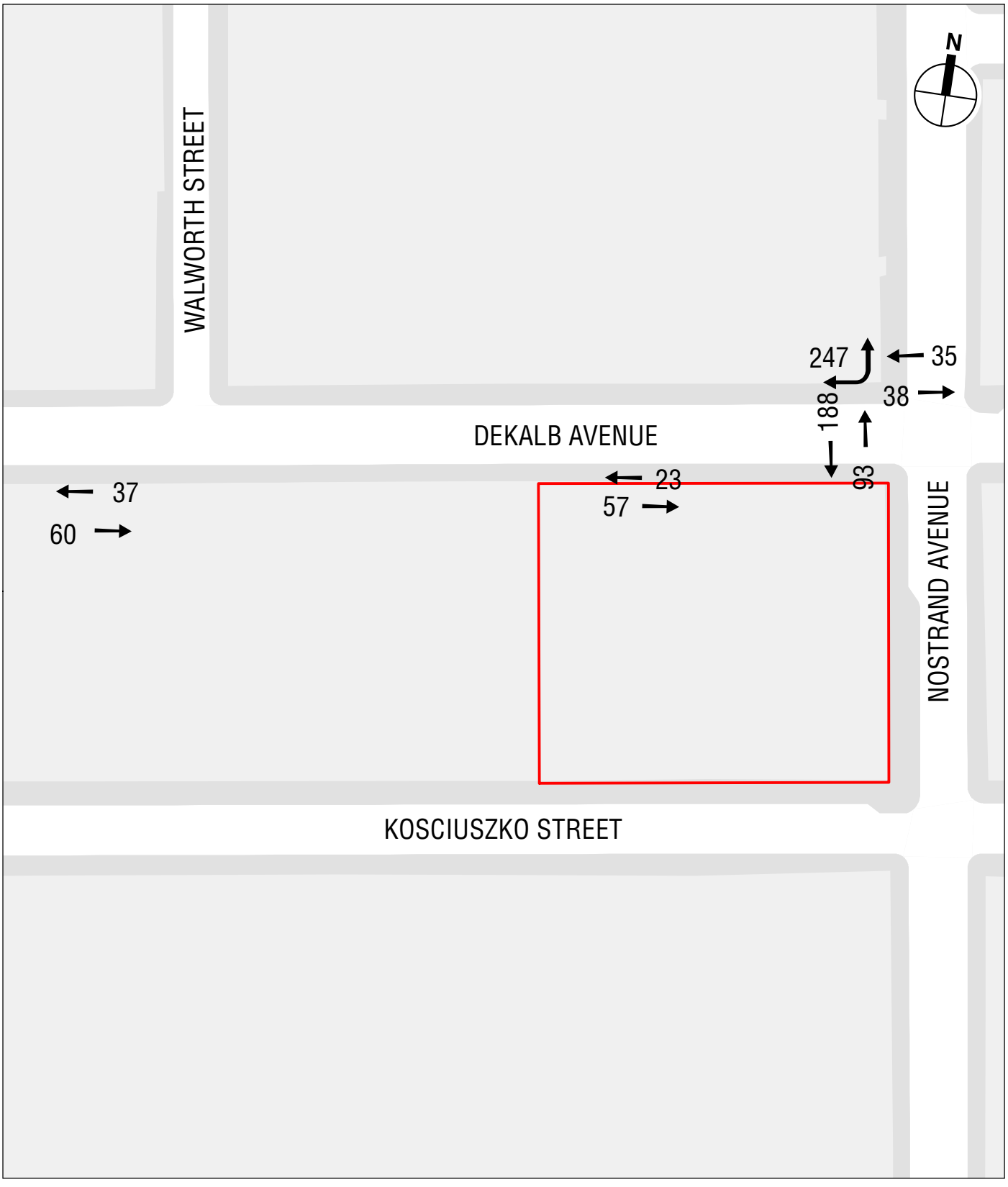
Figure H-13



2019 Existing Pedestrian Volumes
Weekday Midday Peak Hour

270 NOSTRAND AVENUE

Figure H-14



2019 Existing Pedestrian Volumes
Weekday PM Peak Hour

270 NOSTRAND AVENUE

Figure H-15

Table H-10
2019 Existing Conditions: Sidewalk Analysis

Location	Effective Width (ft)	Two-way Peak Hour Volume	PHF	SFP	Platoon LOS
Weekday AM Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	84	0.88	663.7	A
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	7.0	77	0.92	1324.8	A
Weekday Midday Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	81	0.88	688.3	A
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	7.0	63	0.93	1636.8	A
Weekday PM Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	97	0.76	496.3	B
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	7.0	80	0.69	956.3	A
Note: SFP = square feet per pedestrian					

Table H-11
2019 Existing Conditions: Corner Analysis

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS
DeKalb Avenue and Nostrand Avenue	Northwest	201.9	A	380.0	A	273.6	A
Note: SFP = square feet per pedestrian							

THE FUTURE WITHOUT THE PROPOSED ACTIONS

No Action condition pedestrian volumes were estimated by increasing existing pedestrian levels to reflect expected growth in overall travel through and within the study area. As per *CEQR* guidelines, an annual background growth rate of 0.50 percent was assumed for the years 2020 to 2023. A total of 43 development projects expected to occur in the No Action condition (No Build projects) were identified for the ¼-mile study area (see **Figure H-16**). However, most of these planned projects are modest in size and would be modest generators of pedestrian traffic. After reviewing the development programs for and the locations of each of the planned projects, it was determined that background growth will address the increase in pedestrian levels for 36 of the small- to moderate-sized No Build projects in the study area. For the other No Build projects, person trips were determined and incorporated into the No Action condition analyses. **Table H-12** and **Figure H-16** summarize the projects that were accounted for in this future 2023 baseline, including those that were considered as part of the study area background growth. Peak hour pedestrian volumes projected for the No Action condition are shown in **Figures H-17 through H-19**.

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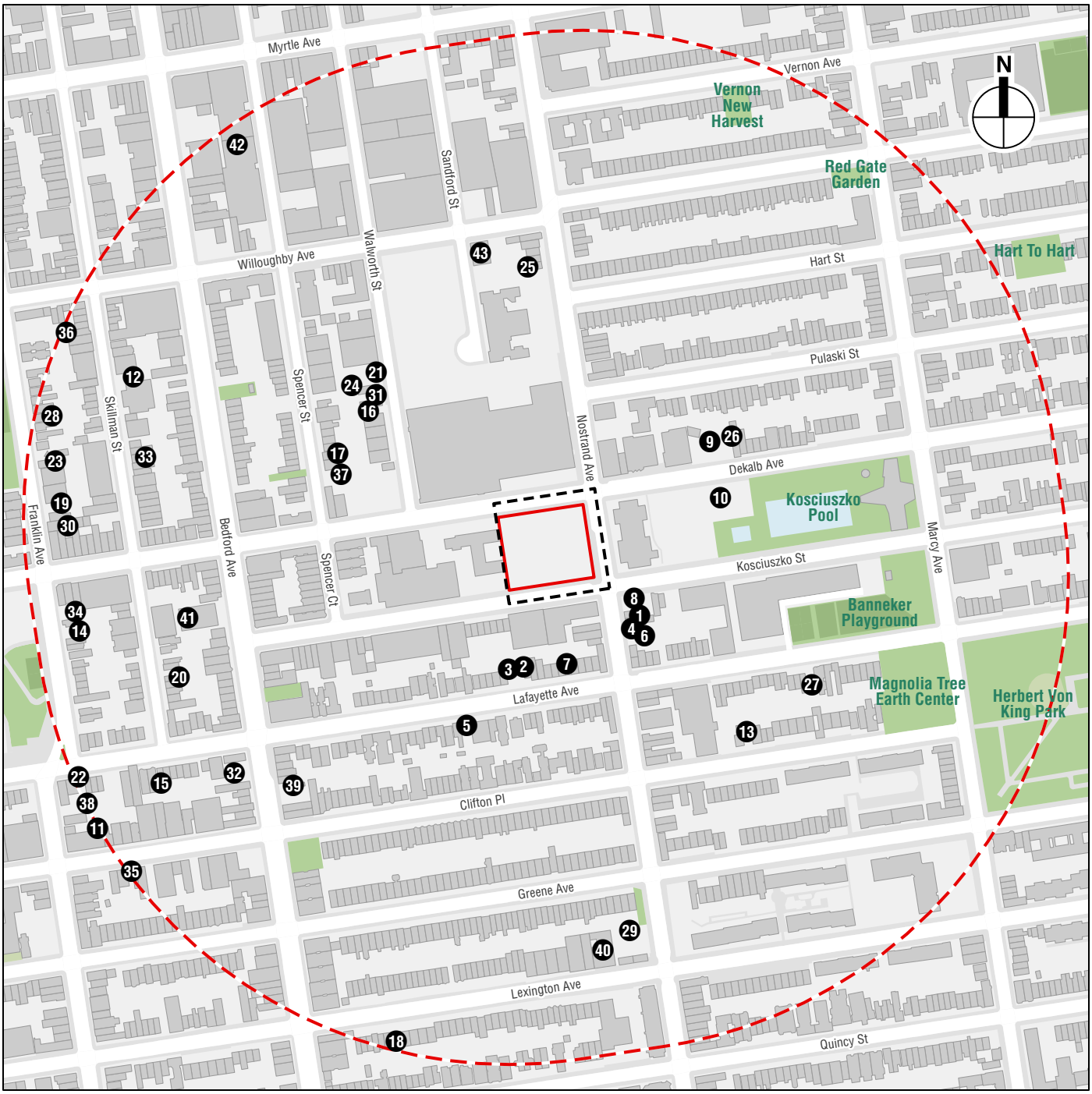


Development Site

Rezoning Area

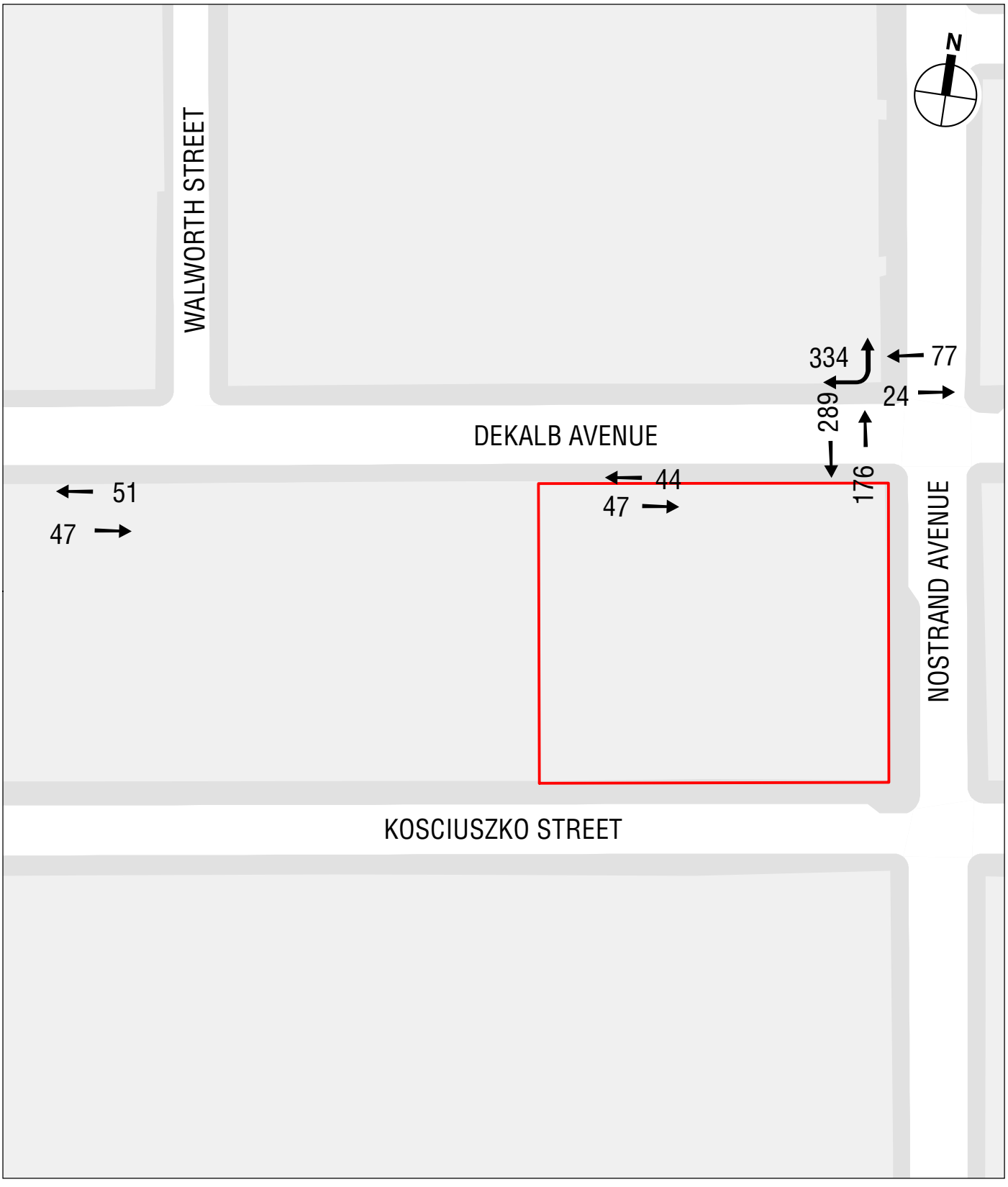
Study Area (1/4-mile perimeter)

No Action Development

No Action Developments

270 NOSTRAND AVENUE

Figure H-16



2023 No Action Pedestrian Volumes
Weekday AM Peak Hour

270 NOSTRAND AVENUE

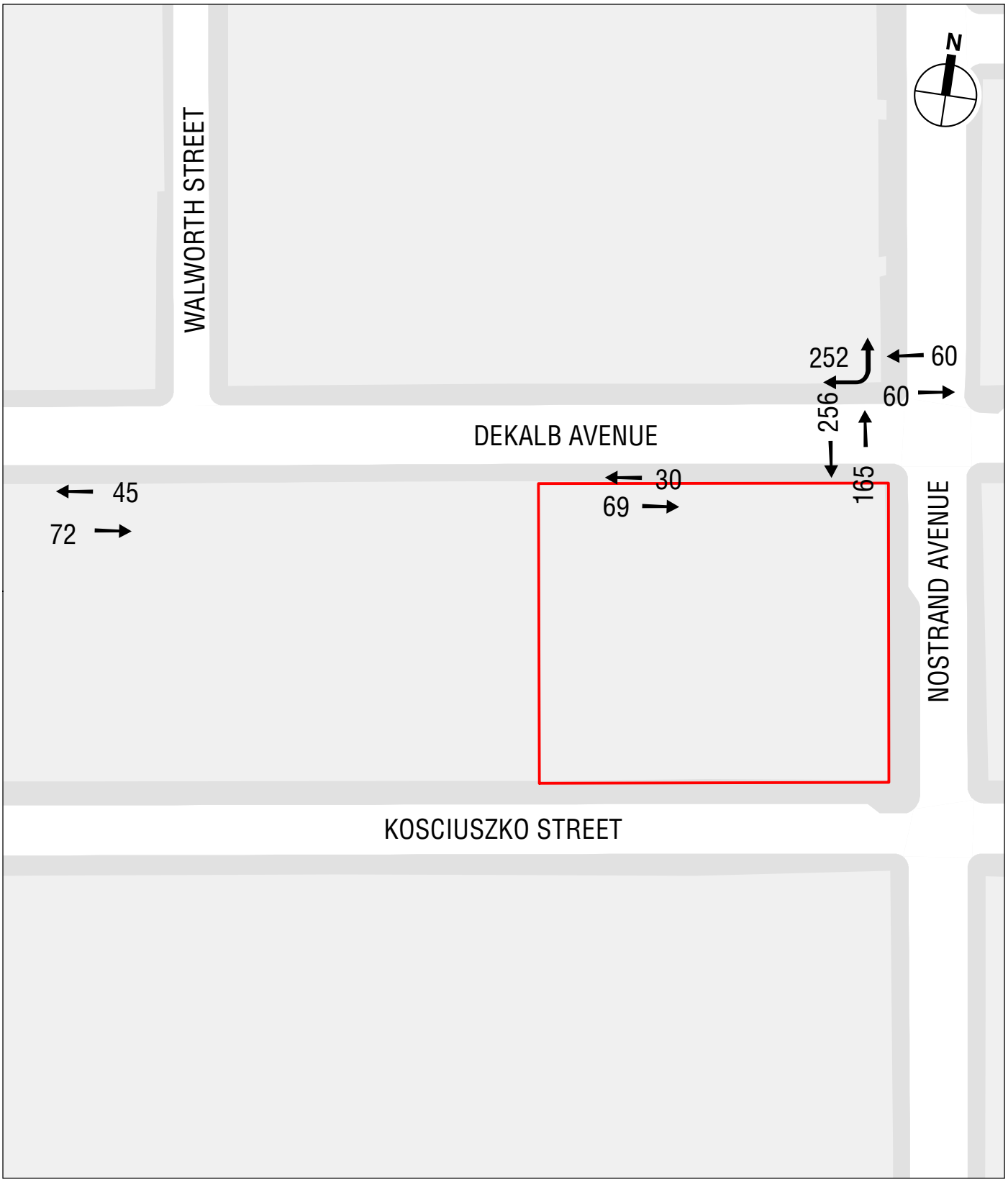
Figure H-17



2023 No Action Pedestrian Volumes
Weekday Midday Peak Hour

270 NOSTRAND AVENUE

Figure H-18



2023 No Action Pedestrian Volumes
Weekday PM Peak Hour

270 NOSTRAND AVENUE

Figure H-19

Table H-12
No Build Projects Expected to be Complete by 2023

Map Ref. No.[1]	Project Name/ Address	Development Program	Transportation Assumptions	Status/ Build Year[2]
Development Projects within ¼-Mile				
1	249 Nostrand Avenue	Mixed residential/commercial: 2 residential units, 1,711 gsf local retail	Grouped with adjacent No Build Projects 4, 6, and 8: Transportation assumptions from 2014 *CEQR Technical Manual, East New York Rezoning FEIS* (2016), and 2013–2017 American Community Survey data	2023
2	553 Lafayette Avenue	Residential: 7 residential units	Included in background growth	2023
3	551 Lafayette Avenue	Residential: 6 residential units	Included in background growth	2023
4	251 Nostrand Avenue	Mixed residential/commercial/community facility: 2 residential units, 191 gsf local retail, 1,477 gsf community facility	Grouped with adjacent No Build Projects 1, 6, and 8: Transportation assumptions from 2014 *CEQR Technical Manual, East New York Rezoning FEIS* (2016), and 2013–2017 American Community Survey data	2023
5	548 Lafayette Avenue	Residential: 8 residential units	Included in background growth	2023
6	253 Nostrand Avenue	Mixed residential/commercial: 10 residential units, 317 gsf local retail	Grouped with adjacent No Build Projects 1, 4, and 8: Transportation assumptions from 2014 *CEQR Technical Manual, East New York Rezoning FEIS* (2016), and 2013–2017 American Community Survey data	2023
7	563A Lafayette Avenue	Residential: 4 residential units	Included in background growth	2023
8	243 Nostrand Avenue	Mixed residential/commercial: 2 residential units, 1,764 gsf local retail	Grouped with adjacent No Build Projects 1, 4, and 6: Transportation assumptions from 2014 *CEQR Technical Manual, East New York Rezoning FEIS* (2016), and 2013–2017 American Community Survey data	2023
9	633-639 DeKalb Avenue	Residential: 37 residential units	Included in background growth	2023
10	648-654 DeKalb Avenue	Residential: 45 residential units	Included in background growth	2023
11	321 Franklin Avenue	Mixed residential/commercial: 8 residential units, 4,847 gsf local retail	Included in background growth	2023
12	199 Skillman Street	Residential: 4 residential units	Included in background growth	2023
13	327 Clifton Place	Residential: 2 residential units	Included in background growth	2023
14	267 Franklin Avenue	Residential: 10 residential units	Included in background growth	2023
15	476 Lafayette Avenue	Residential: 3 residential units	Included in background growth	2023
16	222 Walworth Street	Residential: 6 residential units	Included in background growth	2023
17	219 Spencer Street	Residential: 7 residential units	Grouped with adjacent No Build Project 37: Transportation assumptions from 2014 *CEQR Technical Manual*, East New York Rezoning FEIS (2016), and 2013–2017 American Community Survey data	2023

Table H-12 (cont'd)
No Build Projects Expected to be Complete by 2023

Map Ref. No.[1]	Project Name/ Address	Development Program	Transportation Assumptions	Status/ Build Year[2]
Development Projects within ¼-Mile				
18	194 Lexington Avenue	Residential: 8 residential units	Included in background growth	2023
19	241 Franklin Avenue	Residential: 3 residential units	Included in background growth	2023
20	275 Skillman Street	Residential: 5 residential units	Included in background growth	2023
21	212 Walworth Street	Residential: 2 residential units	Included in background growth	2023
22	454 Lafayette Avenue	Mixed residential/commercial: 1 residential unit, 1,327 gsf local retail	Included in background growth	2023
23	231 Franklin Avenue	Residential: 7 residential units	Included in background growth	2023
24	214 Walworth Avenue	Residential: 6 residential units	Included in background growth	2023
25	208 Nostrand Avenue	Residential: 16 residential units	Included in background growth	2023
26	641 DeKalb Avenue	Residential: 5 residential units	Included in background growth	2023
27	638 Lafayette Avenue	Residential: 5 residential units	Included in background growth	2023
28	221 Franklin Avenue	Residential: 2 residential units	Included in background growth	2023
29	348 Nostrand Avenue	Mixed residential/commercial: 28 residential units, 1,203 gsf local retail	Included in background growth	2023
30	245 Franklin Avenue	Residential: 16 residential units	Included in background growth	2023
31	218 Walworth Street	Residential: 2 residential units	Included in background growth	2023
32	1044 Bedford Avenue	Residential: 24 residential units	Included in background growth	2023
33	221 Skillman Street	Residential: 6 residential units	Included in background growth	2023
34	263 Franklin Avenue	Mixed residential/commercial: 20 residential units, 1,643 local retail	Included in background growth	2023
35	200 Clifton Place	Residential: 8 residential units	Included in background growth	2023
36	344 Willoughby Avenue	Residential: 5 residential units	Included in background growth	2023
37	223 Spencer Street	Mixed residential/community facility: 14,573 gsf local retail, 6,443 gsf community facility	Grouped with adjacent No Build Project 37: Transportation assumptions from 2014 *CEQR Technical Manual, East New York Rezoning FEIS* (2016), and 2013–2017 American Community Survey data	2023
38	311 Franklin Avenue	Mixed residential/commercial: 9 residential units, 1,327 gsf local retail	Included in background growth	2023
39	1021 Bedford Avenue	Mixed residential/commercial: 15 residential units, 1,162 gsf local retail	Included in background growth	2023
40	275 Lexington Avenue	Residential: 29 residential units	Included in background growth	2023
41	1010 Bedford Avenue	Mixed residential/community facility: 40 residential units, 5,284 gsf community facility	Included in background growth	2023
42	144 Spencer Street	Mixed residential/commercial: 92 residential units, 46,926 gsf local retail	Transportation assumptions from 2014 *CEQR Technical Manual, East New York Rezoning FEIS* (2016), and 2013–2017 American Community Survey data	2023
43	426 Willoughby Avenue	Mixed residential/commercial: 10 residential units, 3,727 gsf local retail	Included in background growth	2023

Notes:
[1] See **Figure H-16**.
[2] Projects for which an expected date of completion is not available are assumed to be complete by the proposed project's Build Year of 2023.

STREET-LEVEL PEDESTRIAN OPERATIONS

As shown in **Tables H-13 and H-14**, in the No Action condition, all sidewalk and corner reservoir analysis locations will continue to operate at favorable LOS B or better.

Table H-13
2023 No Action Condition: Sidewalk Analysis

Location	Effective Width (ft)	Two-way Peak Hour Volume	PHF	SFP	Platoon LOS
Weekday AM Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	98	0.87	562.4	A
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	6.5	91	0.90	1018.2	A
Weekday Midday Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	105	0.86	518.8	B
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	6.5	86	0.89	1065.5	A
Weekday PM Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	117	0.77	416.9	B
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	6.5	99	0.71	738.3	A
Note: SFP = square feet per pedestrian					

Table H-14
2023 No Action Condition: Corner Analysis

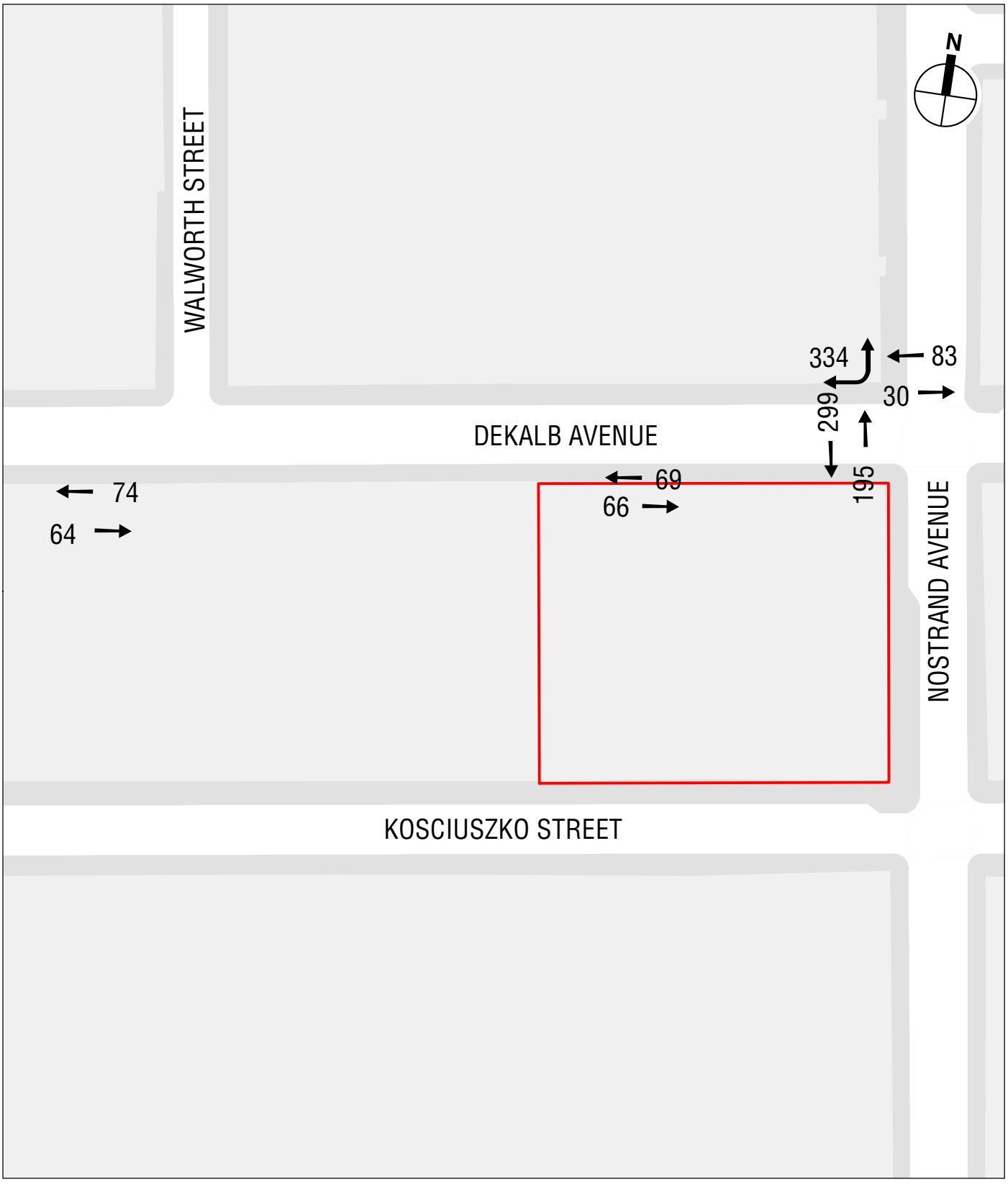
Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS
DeKalb Avenue and Nostrand Avenue	Northwest	174.4	A	225.2	A	201.8	A
Note: SFP = square feet per pedestrian							

THE FUTURE WITH THE PROPOSED ACTIONS

Project-generated pedestrian volumes were assigned to the pedestrian network considering current land uses in the area, population distribution, available transit services, and surrounding pedestrian facilities. The hourly incremental pedestrian volumes presented above in Section B, "Transportation Screening Assessments," were added to the projected 2023 No Action volumes to generate the 2023 With Action pedestrian volumes for analysis (see **Figures H-20 through H-22**).

STREET-LEVEL PEDESTRIAN OPERATIONS

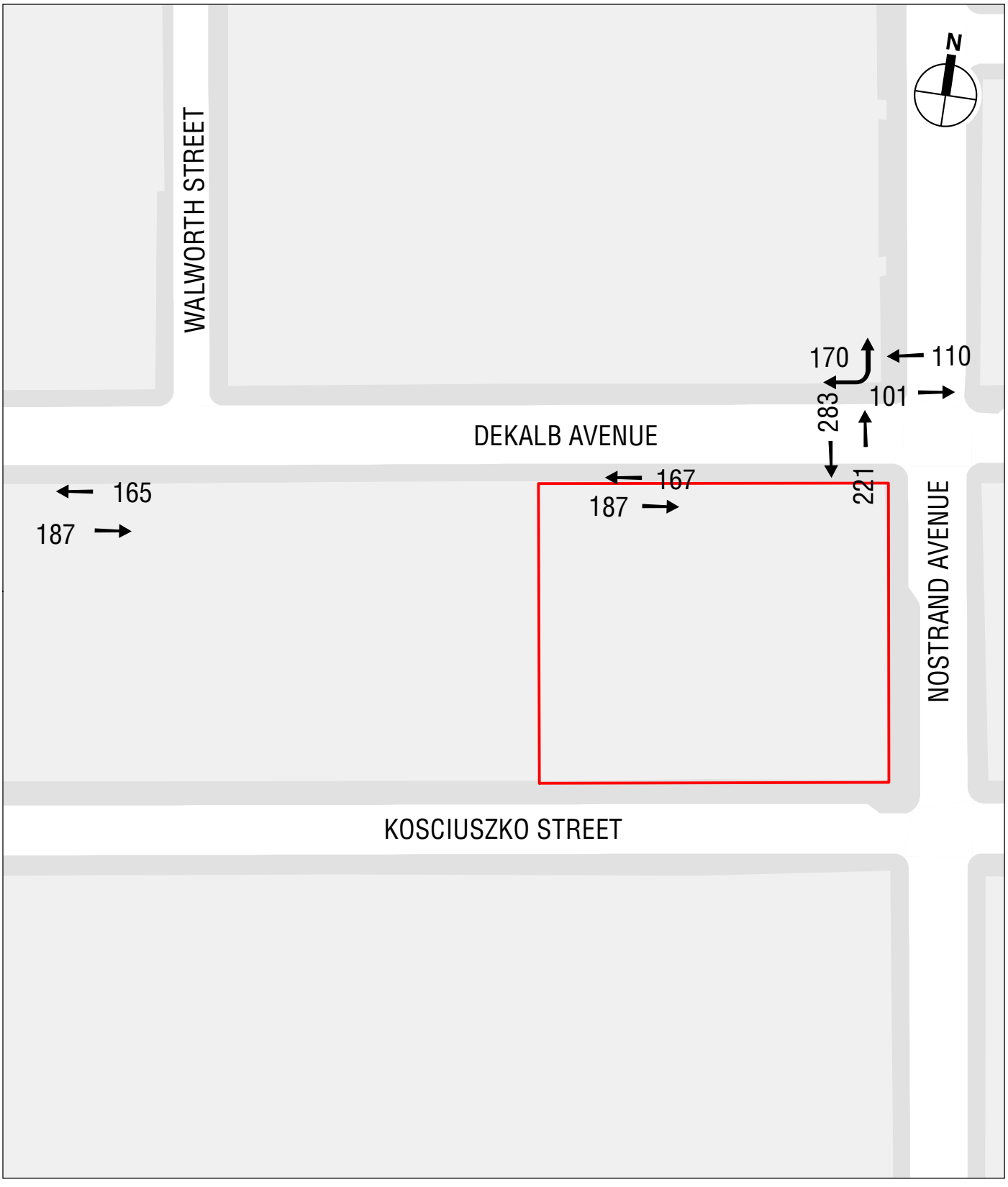
As shown in **Tables H-15 through H-16**, with increased pedestrian traffic surrounding the Development Site, all sidewalk and corner reservoir analysis locations would continue to operate at favorable LOS B or better under the With Action condition. Therefore, the Proposed Development would not result in any significant adverse pedestrian impacts.



2023 With Action Pedestrian Volumes
Weekday AM Peak Hour

270 NOSTRAND AVENUE

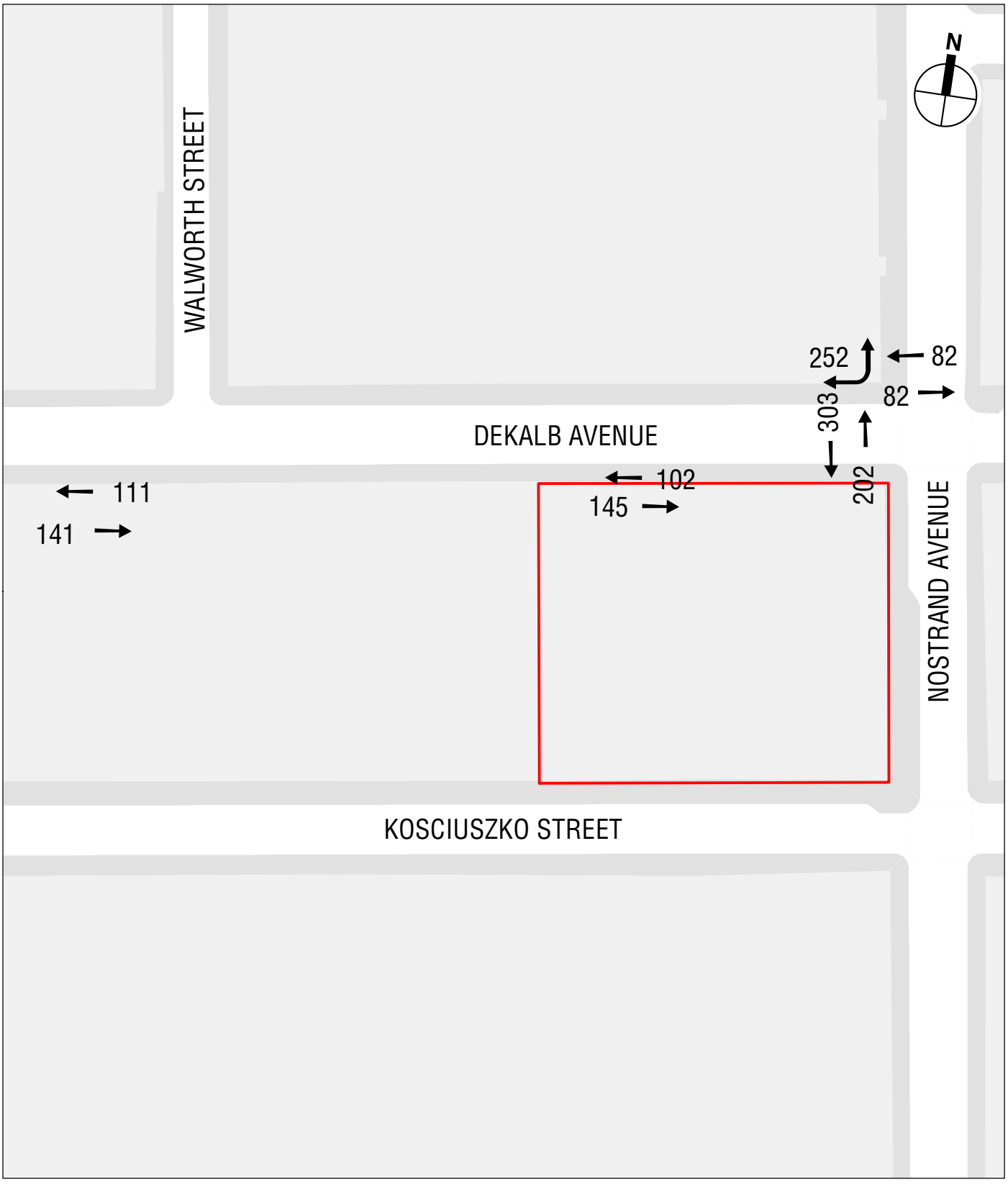
Figure H-20



2023 With Action Pedestrian Volumes
Weekday Midday Peak Hour

270 NOSTRAND AVENUE

Figure H-21



2023 With Action Pedestrian Volumes
Weekday PM Peak Hour

270 NOSTRAND AVENUE

Figure H-22

Table H-15
2023 With Action Condition: Sidewalk Analysis

Location	Effective Width (ft)	Two-way Peak Hour Volume	PHF	SFP	Platoon LOS
Weekday AM Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	138	0.85	390.1	B
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	8.0	135	0.86	807.2	A
Weekday Midday Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	352	0.82	147.2	B
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	8.0	354	0.82	293.3	B
Weekday PM Peak Hour					
South sidewalk along DeKalb Avenue between Spencer Street and Walworth Street	4.0	252	0.78	195.8	B
South sidewalk along DeKalb Avenue between Walworth Street and Nostrand Avenue (at project site retail entrance)	8.0	247	0.76	389.8	B
Note: SFP = square feet per pedestrian					

Table H-16
2023 With Action Condition: Corner Analysis

Location	Corner	Weekday AM Peak Hour		Weekday Midday Peak Hour		Weekday PM Peak Hour	
		SFP	LOS	SFP	LOS	SFP	LOS
DeKalb Avenue and Nostrand Avenue	Northwest	166.4	A	165.8	A	171.0	A
Note: SFP = square feet per pedestrian							

✷

A. INTRODUCTION

As described in Attachment A, "Project Description and Screening Analyses," the Proposed Actions would result in the construction of a mixed-use building containing residential, commercial, and community facility uses (the "Proposed Development") at 270 Nostrand Avenue (Block 1778, Lot 55 – the "Development Site") in the Bedford Stuyvesant neighborhood of Brooklyn, Community District 3. The potential for air quality impacts associated with the Proposed Development is assessed in this attachment.

The maximum projected hourly incremental traffic volumes generated by the Proposed Development would not exceed the carbon monoxide (CO) screening threshold defined in the 2014 *City Environmental Quality Review (CEQR) Technical Manual* (170 peak-hour vehicle trips at an intersection in the study area). The incremental traffic volumes would also not exceed the particulate matter (PM) emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. Therefore, no mobile source intersection analysis was required. The Proposed Development would include a 176-space parking garage. Therefore, an analysis was conducted to evaluate potential future pollutant concentrations in the vicinity of the proposed parking garage.

Since the Proposed Development would include fossil fuel-fired heat and water systems, a stationary source analysis was conducted to evaluate the potential impact from these sources on air quality. As discussed in detail below, the Proposed Development would not result in any significant adverse impacts on air quality.

The Development Site is located within 400 feet of a manufacturing zoned district. Therefore, the potential for emissions from existing nearby industrial facilities to impact air quality at the Development Site was assessed.

B. METHODOLOGY FOR PREDICTING POLLUTANT CONCENTRATIONS

MOBILE SOURCES

PARKING ANALYSIS

Emissions from vehicles using the parking facility could potentially affect ambient levels of CO and PM at adjacent receptors. An analysis of the emissions from the outlet vents and their dispersion in the environment was performed, calculating pollutant levels in the surrounding area, using the methodology set forth in the *CEQR Technical Manual*. Emissions from vehicles entering, parking, and exiting the garage were estimated using the United States Environmental Protection Agency (USEPA) MOVES mobile source emission model, as referenced in the *CEQR Technical Manual*. For all arriving and departing vehicles, an average speed of 5 miles per hour

was conservatively assumed for travel within the parking garage. In addition, all departing vehicles were assumed to idle for 1 minute before proceeding to the exit. Since specific development plans for the garage have not yet been defined the garage was assumed to provide a minimum airflow of one cubic foot per minute of fresh air per gross square foot of garage area, as referenced in the *CEQR Technical Manual*.

To determine pollutant concentrations, the outlet vents were analyzed as a "virtual point source" using the methodology in the United States Environmental Protection Agency's (EPA) *Workbook of Atmospheric Dispersion Estimates, AP-26*. This methodology estimates CO and PM concentrations at various distances from an outlet vent by assuming that the concentration in the garage is equal to the concentration leaving the vent, and determining the appropriate initial horizontal and vertical dispersion coefficients at the vent faces. It was assumed for the purpose of this analysis that all levels of the parking garage would be mechanically ventilated.

The 8-hour average CO impact was determined based on the highest rolling 8-hour average parking ins and outs. The 24-hour PM impact was determined based on the average parking ins and outs (on a 24-hour and annual average basis). Traffic data for the parking garage analysis were derived from the trip generation analysis described in Attachment H, "Transportation." Background and on-street concentrations were added to the modeling results to obtain the total ambient levels for CO. The 24-hour average $PM_{2.5}$ background concentration was used to determine the *de minimis* criteria threshold.

STATIONARY SOURCES

Stationary source analyses were conducted using the methodology described in the *CEQR Technical Manual* to assess air quality impacts associated with emissions from the Proposed Development's heat and hot water systems. An initial screening was prepared using basic project information and applying thresholds defined in the *CEQR Technical Manual*, and further screening was prepared using the U.S. Environmental Protection Agency's (EPA) AERSCREEN model to evaluate potential 1-hour average concentration of nitrogen dioxide (NO_2) and 24-hour and annual average concentrations of particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$), which are not assessed in the initial screening procedure.

Potential 1-hour average NO_2 concentrations were added to representative background concentrations in the area and compared with the NAAQS. Potential 24-hour and annual average incremental concentrations of $PM_{2.5}$ were compared with the $PM_{2.5}$ *de minimis* criteria in the *CEQR Technical Manual*, which are defined as follows:

- Predicted increase of more than half the difference between the background concentration and the 24-hour standard;
- Annual average $PM_{2.5}$ concentration increments which are predicted to be greater than 0.1 $\mu g/m^3$ at ground level on a neighborhood scale (i.e., the annual increase in concentration representing the average over an area of approximately 1 square kilometer, centered on the location where the maximum ground-level impact is predicted for stationary sources); or
- Annual average $PM_{2.5}$ concentration increments, which are predicted to be greater than 0.3 $\mu g/m^3$ at a discrete location (elevated or ground level).

HEAT AND HOT WATER SYSTEMS

INITIAL SCREENING ANALYSIS

An initial screening was performed using the methodology described in Chapter 17, Section 322.1 of the *CEQR Technical Manual*. This analysis determines the threshold of development size below which the action would not have a significant adverse impact relative to CO, particulate matter less than 10 micrometers in diameter (PM_{10}), 3-hour average sulfur dioxide (SO_2), and annual average NO_2 NAAQS levels (see AERSCREEN Analysis below for additional standards). The screening is based on the distance from the Proposed Development to the nearest building of similar or greater height. The screening procedure uses information regarding the type of fuel to be burned, the development type and maximum size, and the exhaust stack height to evaluate whether or not a significant impact is possible.

The initial screening was based on a 445,085-gross square feet (gsf) building, with the nearest receptor of similar or greater height at a distance of over 400 feet.

AERSCREEN ANALYSIS

Potential 1-hour average NO_2 and 24-hour and annual average $PM_{2.5}$ impacts from the Proposed Development's heat and hot water system's emissions were evaluated using the latest version of EPA's AERSCREEN model (version 16216). The AERSCREEN model projects worst-case 1-hour average concentrations downwind from a point, area, or volume source, and longer-period averages are estimated by multiplying the 1-hour results by persistence factors established by EPA or provided in the *CEQR Technical Manual*. AERSCREEN generates application-specific worst-case meteorology using representative minimum and maximum ambient air temperatures, and site-specific surface characteristics such as albedo, Bowen ratio, and surface roughness length.[1] The AERSCREEN model was used to calculate worst-case ambient concentrations of NO_2 and $PM_{2.5}$ from the Proposed Development downwind of the stack.

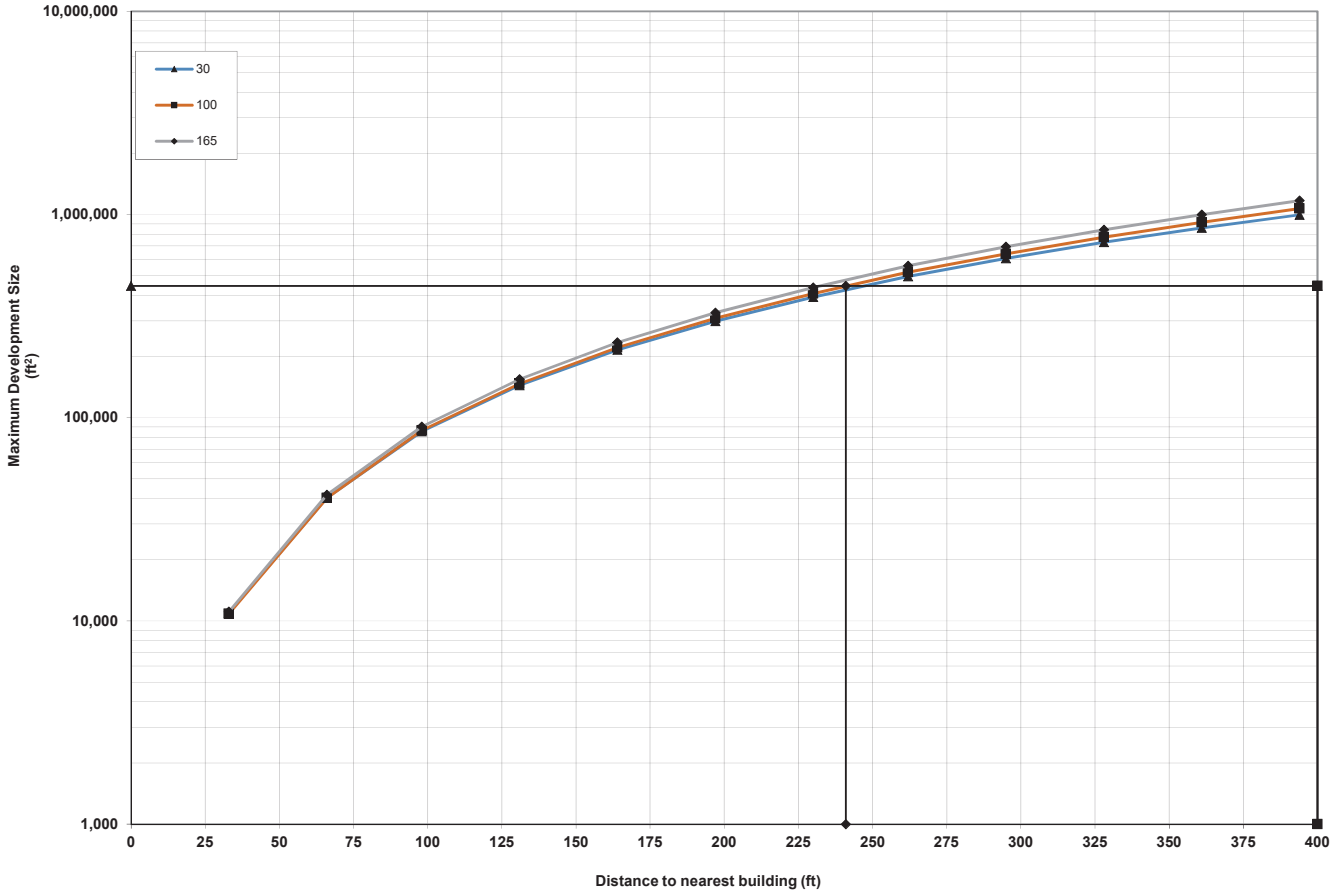
The model incorporates the Plume Rise Model Enhancements (PRIME) downwash algorithm, which is designed to predict concentrations in the "cavity region" (i.e., the area around a structure, which under certain conditions may affect an exhaust plume, causing a portion of the plume to become entrained in a recirculation region). AERSCREEN uses the Building Profile Input Program for PRIME (BPIPPRM) to provide a detailed analysis of downwash influences on a direction-specific basis. AERSCREEN also incorporates AERMOD's complex terrain algorithms and utilizes the AERMAP terrain processor to account for the actual terrain in the vicinity of the source on a direction-specific basis.

The AERSCREEN model was run both with and without the influence of building downwash, using urban diffusion coefficients that were based on a review of land-use maps of the area. Other model options were selected based on EPA guidance.

[1] Albedo is the fraction of the total incident solar radiation reflected by the ground surface. The Bowen ratio is the ratio of the sensible heat flux to the latent (evaporative) heat flux. The surface roughness length is related to the height of obstacles to the wind flow and represents the height at which the mean horizontal wind speed is zero based on a logarithmic profile.

HVAC Screening Analysis
Site: 270 Nostrand Avenue
Date: 10/28/2019
Pass

FIG App 17-5
SO_2 BOILER SCREEN
RESIDENTIAL DEVELOPMENT - FUEL OIL #2



Stack Height: 148 ft
Distance to Nearest Building of Similar or Greater Height: 400 ft
Proposed Maximum SQFA: 445,085 sq. ft
Minimum Allowable Distance to Nearest Building: 241 ft

Notes:

Maximum 1-hour average NO_2 concentrations were estimated using an NO_2 to NO_x ratio of 0.8—the recommended default ambient ratio per EPA guidance.[2]

Emission Rates and Stack Parameters

Annual emission rates for heating and hot water systems were calculated based on fuel consumption estimates, using energy intensity estimates based on type of development and size of the building (445,085 gsf)[3] as recommended in the *CEQR Technical Manual*, and applying emission factors for natural gas-fired boilers.[4] $PM_{2.5}$ emissions include both the filterable and condensable components. The short-term emission rates (24-hour and shorter) were calculated by scaling the annual emissions to account for a 100-day heating season. The exhaust from the heat and hot water systems was assumed to be vented through a single stack located three feet above the roof of the building at a height of approximately 148 feet above grade.

To calculate exhaust velocity, the fuel consumption of the Proposed Development was multiplied by EPA's fuel factor for natural gas,[5] providing the exhaust flow rate at standard temperature; the flow rate was then corrected for the exhaust temperature, and exhaust velocity was calculated based on the stack diameter. Assumptions for stack diameter and exhaust temperature for the proposed systems were obtained from a survey of boiler exhaust data prepared and provided by New York City Department of Environmental Protection (DEP),[6] and were used to calculate the exhaust velocity.

The emission rates and exhaust stack parameters used in the modeling analyses are presented in **Table I-1**.

Table I-1
Exhaust Stack Parameters and Emission Rates

Stack Parameter	Value
Stack Height (feet)	148
Stack Diameter (feet)(1)	4.4
Exhaust Velocity (meters/second)(1)	0.99
Exhaust Temperature (degrees Fahrenheit)(1)	307.8
Emission Rate (grams/second)	
NO_2 (1-hour average)	0.1381
NO_2 (Annual average)	0.0378
$PM_{2.5}$ (24-hour average)	0.0105
$PM_{2.5}$ (Annual average)	0.0028

Note:
(1) Stack parameter assumptions were obtained from a survey of boiler exhaust data provided by DEP.

[2] EPA. Memorandum: Clarification on the use of AERMOD Dispersion Modeling for Demonstrating Compliance with the NO2 National Ambient Air Quality Standard. September 30, 2014.

[3] This floor area is slightly larger than the anticipated floor area for the Proposed Development (approximately 444,289 gsf), and therefore provides for a conservative assessment of potential pollutant concentrations.

[4] EPA. Compilation of Air Pollutant Emission Factors AP-42. 5th Ed., V. I, Ch. 1.4. September, 1998.

[5] EPA. Standards of Performance for New Stationary Sources. 40 CFR Chapter I Subchapter C Part 60. Appendix A-7, Table 19-2. 2013.

[6] DEP. Boiler Database. Personal communication from Mitchell Wimbish on August 11, 2017.

Background Concentrations

To estimate the maximum expected pollutant concentration at a given location (receptor), the predicted impacts must be added to a background value that accounts for existing pollutant concentrations from other sources that are not directly accounted for in the model (see **Table I-2**). For the 1-hour average NO_2 concentration at a given receptor, the modeled concentration from the source was added to the background concentration representing the three-year average (2016–2018) of the annual 98th percentile of the daily-highest one-hour average NO_2 concentrations (this is the statistical form of the standard) monitored at the nearest New York State Department of Environmental (NYSDEC) background monitoring station—Queens College, Queens. Note that the maximum modeled concentration would not necessarily coincide with the maximum background concentrations, and, therefore, this approach results in a conservatively high estimate. The annual NO_2 background is based on the maximum annual average value measured over the most recent five years for which data is available (2014–2018).

Table I-2
Maximum Background Pollutant Concentrations

Pollutant	Average Period	Location	Concentration (µg/m³)	NAAQS (µg/m³)
NO_2	1-hour	Queens College, Queens	105.8	188
	Annual	Queens College, Queens	32.3	100
$PM_{2.5}$	24-hour	Division St., Manhattan	19.2	35
Source: New York State Air Quality Report Ambient Air Monitoring System, NYSDEC, 2014–2018.				

$PM_{2.5}$ impacts are assessed on an incremental basis and compared with the $PM_{2.5}$ *de minimis* criteria. The $PM_{2.5}$ 24-hour average background concentration based on the 98th percentile concentration, averaged over the years 2016–2018 was used to establish the *de minimis* value of 7.9 µg/m^3. $PM_{2.5}$ annual average impacts are assessed on an incremental basis and compared to the $PM_{2.5}$ *de minimis* criteria, with considering the annual background. Therefore, the annual $PM_{2.5}$ background is not presented in **Table I-2**.

Receptor Placement

Receptors (locations at which concentrations are projected) generally include operable windows in residential or other buildings, air intakes, and publicly accessible open space locations, as applicable. The nearest building of similar or greater height is located at a distance of more than 400 feet from the Proposed Development. Consequently, receptors representing buildings that were the tallest within this distance were modeled, at various heights, and the worst-case ground level concentration was also evaluated. Discrete receptors were modeled along existing and proposed-building façades, including the adjacent, residential building at 590 Dekalb Avenue, as well as three nearby developments expected to be completed absent the Proposed Actions by 2023 (253 Nostrand Avenue, 633 Dekalb Avenue, and 648 Dekalb Avenue).

INDUSTRIAL SOURCES

Nearby industrial facilities were examined to identify any potential for adverse impacts on sensitive uses on the Development Site from air toxics. All industrial and manufacturing uses within 400 feet of the Development Site (the industrial source study area) were considered for inclusion in the air quality impact analyses.

Land use maps and aerial photographs were reviewed to identify potential sources of emissions from manufacturing/industrial operations. A search of federal, state, and city compliance and

permit data within the study area was conducted using DEP's Clean Air Tracking System (CATS) database[7] and EPA's Envirofacts database.[8] Next, a field survey of uses within 400 feet of the Development Site was conducted on October 18, 2019 to determine the operating status of permitted industries and identify any potential industrial sites not included in the permit databases.

No permitted activities were identified based on the permit search and no other sources of emissions were identified in the land use review and field survey. Therefore, no significant impacts on sensitive uses within the Development Site are anticipated from industrial source emissions.

MAJOR OR LARGE STATIONARY EMISSION SOURCES

The *CEQR Technical Manual* requires an analysis of projects that may result in a significant adverse impact due to certain types of new uses located near a "large" or "major" emissions source. Major sources are defined as those located at facilities that have a Title V or Prevention of Significant Deterioration air permit, while large sources are defined as those located at facilities that require a State Facility Permit. To assess the potential effects of these existing sources on the projected and potential development sites, a review of existing permitted facilities was conducted. Sources of information reviewed included the DEC Title V and State Facility Permit websites. The review of major- and large-sources permits[9] found no such facilities within 1,000 feet of the Development Site, and therefore no additional analysis is required, and no significant adverse impacts would occur on the Development Site for major or large stationary sources.

C. PROBABLE IMPACTS OF THE PROPOSED ACTIONS

MOBILE SOURCES

PARKING ANALYSIS

Based on the methodology previously described, the maximum predicted CO and PM concentrations from the parking garage at the Development Site were analyzed, assuming a near side sidewalk receptor on the same side of the street (7 feet from the Development Site), a far side sidewalk receptor across Koscuiszko Street (72 feet from the Development Site), and a building façade receptor assumed to be located 10 feet above the garage outlet vent. All values are the highest predicted concentrations for any time period analyzed.

The maximum predicted 8-hour average CO concentration modeled is 1.47 ppm at the building façade receptor. This value includes a predicted concentration of 0.08 ppm from emissions within the parking facility, and a background level of 1.4 ppm. The maximum predicted concentration is substantially below the applicable standard of 9 ppm, and the incremental concentration of 0.08 ppm is below the *de minimis* CO criterion of 3.8 ppm.

The maximum predicted 24-hour and annual average $PM_{2.5}$ increments from the vehicles using the garage are 0.21 $\mu g/m^3$ and 0.04 $\mu g/m^3$, respectively at the building facade receptor. These values

[7] DEP. Clean Air Tracking System database. https://a826-web01.nyc.gov/DEP.BoilerInformationExt. Accessed October 17, 2019.

[8] EPA. Envirofacts Data Warehouse. https://www3.epa.gov/enviro/. Accessed April 25, 2018.

[9] NYSDEC. Access to DEC Air Permits. http://www.dec.ny.gov/chemical/32249.html. Accessed October 17, 2019.

are well below the respective $PM_{2.5}$ *de minimis* criteria of 7.9 µg/m^3 for the 24-hour average concentration and 0.3 µg/m^3 for the annual average concentration.

Therefore, the proposed parking garage would not have the potential to result in any significant adverse air quality impacts.

STATIONARY SOURCES

INITIAL SCREENING ANALYSIS

The results of the initial screening analysis are presented in **Figure I-1**. The distance to the nearest building of similar height would be over 400 feet away. As indicated by the analysis, potential impacts would not occur at distances greater than 241 feet. Therefore, no significant impact is projected. Since annual average NO_2 is the critical pollutant in this analysis, impacts would also not be expected for the SO_2, PM_{10} and CO NAAQS.

AERSCREEN ANALYSIS

The results of the AERSCREEN analysis for NO_2 and $PM_{2.5}$ are presented in **Table I-3**. As presented in the table, no exceedance of the NO_2 and $PM_{2.5}$ NAAQS are predicted from the Proposed Development. In addition, the maximum predicted incremental concentrations of $PM_{2.5}$ are not predicted to exceed the CEQR *de minimis* criteria. Overall, based on the two analyses presented, the Proposed Development's heating and hot water system would not result in any significant adverse air quality impacts.

Table I-3
Maximum Modeled Pollutant Concentrations (µg/m3)

Pollutant	Averaging Period	Maximum Modeled Impact	Background	Total Concentration	Criterion
NO_2	1-hour	15.1[(1)]	105.8	120.9	188[(2)]
	Annual	0.5	32.3	32.8	100[(3)]
$PM_{2.5}$	24-hour	0.9	N/A	N/A	7.9[(3)]
	Annual	0.039	N/A	N/A	0.3[(4)]

Notes:
N/A – Not Applicable
(1) The 1-hour average NO_2 concentration is estimated using NO_2 to NO_x ratio of 0.8 as per EPA guidance.
(2) NAAQS
(3) $PM_{2.5}$ *de minimis* criteria—24-hour average, not to exceed more than half the difference between the background concentration and the 24-hour standard of 35 µg/m^3
(4) $PM_{2.5}$ *de minimis* criteria—annual (discrete receptor)

To avoid the potential for significant adverse air quality impacts related to the Proposed Development's heating and hot water systems, an (E) Designation for air quality (E-606) would be applied to the project site (Block 1778, Lot 55). The text of the (E) Designation would be as follows:

> **Any new development on Block 1778 Lot 55 must exclusively utilize natural gas as the type of fuel for heating and hot water equipment, and ensure that heating, ventilation and air conditioning and/or the hot water equipment stack(s) is located at least 160 feet above grade, and no more than 35 feet from the lot line facing Nostrand Avenue to avoid any potential significant air quality impacts.**

Overall, with these restrictions in place, there would be no significant adverse air quality impact from the Proposed Development's heating and hot water systems. ✷

A. INTRODUCTION

As discussed in Attachment H, "Transportation," the number of vehicle trips generated by the Proposed Development is lower than the threshold that would require any detailed analysis. Therefore, it is not expected that the Proposed Development would generate sufficient traffic to have the potential to cause a significant noise impact (i.e., it would not result in a doubling of noise passenger car equivalents [Noise PCEs] which would be necessary to cause a 3 dBA increase in noise levels). However, the effect of ambient noise (i.e., noise from vehicular traffic) is addressed in the following section and an analysis is presented that determines the level of building attenuation necessary to ensure that the Proposed Development's interior noise levels satisfy applicable interior noise criteria under City Environmental Quality Review (CEQR) requirements.

B. ACOUSTICAL FUNDAMENTALS

Sound is a fluctuation in air pressure. Sound pressure levels are measured in units called decibels (dB). The particular character of the sound that we hear (e.g., a whistle compared to a French horn) is determined by the speed, or frequency, at which the air pressure fluctuates, or oscillates. Frequency defines the oscillation of sound pressure in terms of cycles per second. One cycle per second is known as 1 Hertz (Hz). People can hear over a relatively limited range of sound frequencies, generally between 20 Hz and 20,000 Hz, and the human ear does not perceive all frequencies equally well. High frequencies (e.g., a whistle) are more easily discernable and therefore more intrusive than many of the lower frequencies (e.g., the lower notes on the French horn).

"A"-WEIGHTED SOUND LEVEL (DBA)

In order to establish a uniform noise measurement that simulates people's perception of loudness and annoyance, the decibel measurement is weighted to account for those frequencies most audible to the human ear. This is known as the A-weighted sound level, or dBA, and it is the descriptor of noise levels most often used for community noise. As shown in **Table J-1**, the threshold of human hearing is defined as 0 dBA; very quiet conditions (e.g., a library) are approximately 40 dBA; normal daily activity levels are between 50 dBA and 70 dBA; noisy levels are above 70 dBA; and loud, intrusive, and deafening levels approach 130 dBA.

In considering these values, it is important to note that the dBA scale is logarithmic, meaning that each increase of 10 dBA describes a doubling of perceived loudness. Thus, the background noise in an office, at 50 dBA, is perceived as twice as loud as a library at 40 dBA. For most people to perceive an increase in noise, it must be at least 3 dBA. At 5 dBA, the change will be readily noticeable.

Table J-1
Common Noise Levels

Sound Source	(dBA)
Military jet, air raid siren	130
Amplified rock music	110
Jet takeoff at 500 meters	100
Freight train at 30 meters	95
Train horn at 30 meters	90
Heavy truck at 15 meters	80–90
Busy city street, loud shout	80
Busy traffic intersection	70–80
Highway traffic at 15 meters, train	70
Predominantly industrial area	60
Light car traffic at 15 meters, city or commercial areas, or residential areas close to industry	50–60
Background noise in an office	50
Suburban areas with medium-density transportation	40–50
Public library	40
Soft whisper at 5 meters	30
Threshold of hearing	0

Note:
A 10 dBA increase in level appears to double the loudness, and a 10 dBA decrease halves the apparent loudness.
Sources:
Cowan, James P. *Handbook of Environmental Acoustics,* Van Nostrand Reinhold, New York, 1994. Egan, M. David, Architectural Acoustics. McGraw-Hill Book Company, 1988.

SOUND LEVEL DESCRIPTORS

Because the sound pressure level unit of dBA describes a noise level at just one moment and very few noises are constant, other ways of describing noise that fluctuates over extended periods have been developed. One way is to describe the fluctuating sound heard over a specific time period as if it had been a steady, unchanging sound. For this condition, a descriptor called the equivalent sound level, L_{eq}, can be computed. L_{eq} is the constant sound level that, in a given situation and time period (e.g., 1 hour, denoted by $L_{eq(1)}$, or 24 hours, denoted by $L_{eq(24)}$), conveys the same sound energy as the actual time-varying sound. Statistical sound level descriptors such as L_1, L_{10}, L_{50}, L_{90}, and L_x, are used to indicate noise levels that are exceeded 1, 10, 50, 90, and x percent of the time, respectively.

The relationship between L_{eq} and levels of exceedance is worth noting. Because L_{eq} is defined in energy rather than straight numerical terms, it is not simply related to the levels of exceedance. If the noise fluctuates very little, L_{eq} will approximate L_{50} or the median level. If the noise fluctuates broadly, the L_{eq} will be approximately equal to the L_{10} value. If extreme fluctuations are present, the L_{eq} will exceed L_{90} or the background level by 10 or more decibels. Thus the relationship between L_{eq} and the levels of exceedance will depend on the character of the noise. In community noise measurements, it has been observed that the L_{eq} is generally between L_{10} and L_{50}.

For purposes of the Proposed Development, the L_{10} descriptor has been selected as the noise descriptor to be used to satisfy applicable interior noise criteria. The 1-hour L_{10} is the noise descriptor used in the 2014 *CEQR Technical Manual* noise exposure guidelines for City environmental impact review classification.

C. NOISE STANDARDS AND CRITERIA

NEW YORK CEQR NOISE CRITERIA

The *CEQR Technical Manual* sets external noise exposure standards; these standards are shown in **Table J-2**. Noise exposure is classified into four categories: acceptable, marginally acceptable, marginally unacceptable, and clearly unacceptable. The noise level specified for outdoor areas requiring serenity and quiet is 55 dBA $L_{10(1h)}$.

Table J-2
Noise Exposure Guidelines For Use in City Environmental Impact Review

Receptor Type	Time Period	Acceptable General External Exposure	Airport[3] Exposure	Marginally Acceptable General External Exposure	Airport[3] Exposure	Marginally Unacceptable General External Exposure	Airport[3] Exposure	Clearly Unacceptable General External Exposure	Airport[3] Exposure
Outdoor area requiring serenity and quiet[2]		L10 ≤ 55 dBA	---------- Ldn ≤ 60 dBA ----------	N/A	N/A	N/A	N/A	N/A	N/A
Hospital, nursing home		$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 65$ dBA	---------- 60 < Ldn ≤ 65 dBA ----------	65 < $L_{10} \leq 80$ dBA	(i) 65 < Ldn ≤ 70 dBA, (II) 70 ≤ Ldn	$L_{10} > 80$ dBA	---------- Ldn ≤ 75 dBA ----------
Residence, residential hotel, or motel	7 AM to 10 PM	$L_{10} \leq 65$ dBA		65 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
	10 PM to 7 AM	$L_{10} \leq 55$ dBA		55 < $L_{10} \leq 70$ dBA		70 < $L_{10} \leq 80$ dBA		$L_{10} > 80$ dBA	
School, museum, library, court, house of worship, transient hotel or motel, public meeting room, auditorium, outpatient public health facility		Same as Residential Day (7 AM–11 PM)		Same as Residential Day (7 AM–11 PM)		Same as Residential Day (7 AM–11 PM)		Same as Residential Day (7 AM–11 PM)	
Commercial or office		Same as Residential Day (7 AM–11 PM)		Same as Residential Day (7 AM–11 PM)		Same as Residential Day (7 AM–11 PM)		Same as Residential Day (7 AM–11 PM)	
Industrial, public areas only[4]	Note 4	Note 4		Note 4		Note 4		Note 4	

Notes:
(i) In addition, any new activity shall not increase the ambient noise level by 3 dBA or more; (ii) *CEQR Technical Manual* noise criteria for train noise are similar to the above aircraft noise standards: the noise category for train noise is found by taking the L_{dn} value for such train noise to be an L^{Y}_{dn} (L_{dn} contour) value.

Table Notes:
[1] Measurements and projections of noise exposures are to be made at appropriate heights above site boundaries as given by American National Standards Institute (ANSI) Standards; all values are for the worst hour in the time period.
[2] Tracts of land where serenity and quiet are extraordinarily important and serve an important public need, and where the preservation of these qualities is essential for the area to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, or open spaces dedicated or recognized by appropriate local officials for activities requiring special qualities of serenity and quiet.
[3] One may use FAA-approved L_{dn} contours supplied by the Port Authority, or the noise contours may be computed from the federally approved INM Computer Model using flight data supplied by the Port Authority of New York and New Jersey.
[4] External Noise Exposure standards for industrial areas of sounds produced by industrial operations other than operating motor vehicles or other transportation facilities are spelled out in the New York City Zoning Resolution, Sections 42-20 and 42-21. The referenced standards apply to M1, M2, and M3 manufacturing districts and to adjoining residence districts (performance standards are octave band standards).

Source:
New York City Department of Environmental Protection (DEP) (adopted policy 1983).

The *CEQR Technical Manual* defines attenuation requirements for buildings based on exterior noise level (see **Table J-3**). Recommended noise attenuation values for buildings are designed to maintain

interior noise levels of 45 dBA or lower for sensitive noise uses and interior noise levels of 50 dBA or lower for commercial office uses and are determined based on exterior $L_{10(1)}$ noise levels.

Table J-3
Required Attenuation Values to Achieve Acceptable Interior Noise Levels

	Marginally Unacceptable				Clearly Unacceptable
Noise Level with Proposed Action	$70 < L_{10} \leq 73$	$73 < L_{10} \leq 76$	$76 < L_{10} \leq 78$	$78 < L_{10} \leq 80$	$80 < L_{10}$
Attenuation[A]	(I) 28 dBA	(II) 31 dBA	(III) 33 dBA	(IV) 35 dBA	$36 + (L_{10}–80)^{B}$ dBA

Notes:
[A] The above composite window-wall attenuation values are for residential dwellings and community facility development. Commercial office uses would be 5 dBA less in each category. All the above categories require a closed window situation and hence an alternate means of ventilation.
[B] Required attenuation values increase by 1 dBA increments for L_{10} values greater than 80 dBA.
Source: DEP

D. EXISTING NOISE LEVELS

Existing noise levels in the Development Site were measured at three (3) locations. Receptor Site 1 was located immediately east of the Development Site along Nostrand Avenue. Receptor Site 2 was located immediately north of the Development Site along Dekalb Avenue. Receptor Site 3 was located immediately south of the Development Site along Kosciuszko Street. See **Figure J-1** for a map showing the measurement locations.

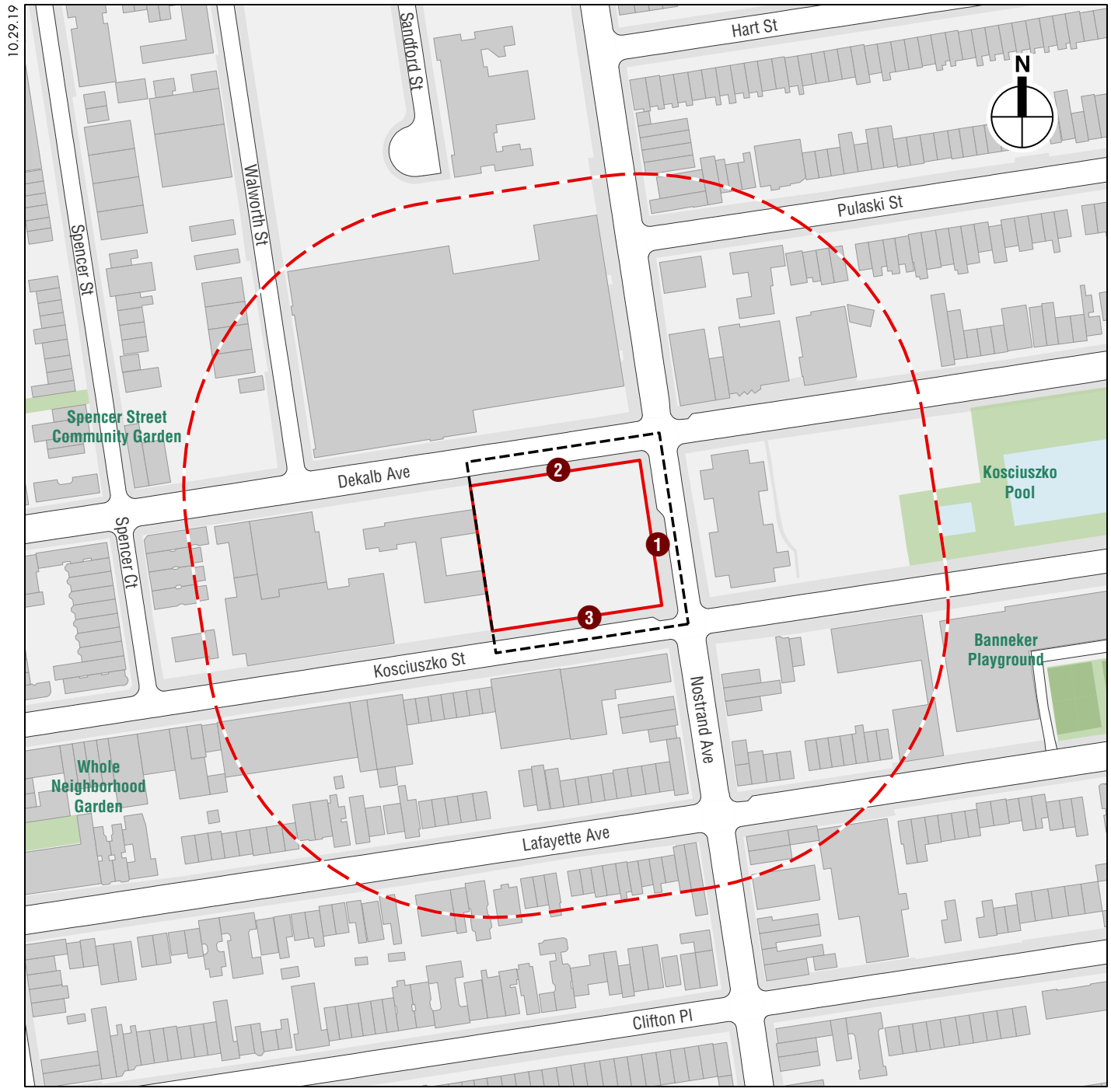
Existing noise levels were measured for 20-minute periods at all sites for each of the weekday AM (7:30 AM to 8:30 AM), MD (12 PM to 2 PM), and PM (5 PM to 6 PM) time periods. Measurements were taken on October 2, 2019. The selected time periods are when the Proposed Development would be expected to experience maximum noise exposure.

EQUIPMENT USED DURING NOISE MONITORING

Measurements were performed using a Brüel & Kjær Sound Level Meter (SLM) Type 2270, a Brüel & Kjær ½-inch microphone Type 4189, and a Brüel & Kjær Sound Level Calibrator Type 4231. The Brüel & Kjær SLM is a Type 1 instrument according to ANSI Standard S1.4-1983 (R2006). The SLM has a laboratory calibration date within one year of the date of the measurements, as is standard practice. The microphone was mounted on a tripod at a height of approximately five feet above the ground and was mounted away from any large reflecting surfaces that could affect the sound level measurements. The SLM was calibrated before and after readings with a Brüel & Kjær Type 4231 Sound Level Calibrator using the appropriate adaptor. Measurements at the location were made on the A-scale (dBA). The data was digitally recorded by the SLM and displayed at the end of the measurement period in units of dBA. Measured quantities included L_{eq}, L_1, L_{10}, L_{50}, and L_{90}. A windscreen was used during all sound measurements except for calibration. All measurement procedures were based on the guidelines outlined in ANSI Standard S1.13-2005.

RESULTS

The results of the existing noise levels are summarized in **Table J-4**. At all receptor sites, vehicular traffic on the adjacent roadways was the dominant noise source. Measured levels are moderate and reflect the level of vehicular activity on the adjacent roadways. In terms of the CEQR criteria,



Noise Measurement Locations

270 NOSTRAND AVENUE

Figure J-1

the existing noise levels at Sites 1 and 2 are in the "marginally unacceptable" category, and the existing noise levels at Site 3 are in the "marginally acceptable" category.

Table J-4
Existing Noise Levels (in dBA)

Site	Location	Period	L_{eq}	L_1	L_{10}	L_{50}	L_{90}
1	Nostrand Avenue between Dekalb Avenue and Kosciuszko Street	AM	71.9	81.5	75.9	67.5	62.0
		MD	73.0	81.9	77.9	67.2	60.0
		PM	70.6	78.6	74.7	67.1	60.2
2	North of the Development Site on Dekalb Avenue	AM	70.2	80.1	70.6	66.0	60.1
		MD	70.7	79.5	71.8	64.3	60.2
		PM	60.8	68.8	65.1	57.4	53.9
3	South of the Development Site on Kosciuszko Street	AM	58.6	68.1	61.2	56.4	53.5
		MD	56.3	63.7	59.4	54.2	51.9
		PM	65.9	76.1	69.2	62.8	57.8

Note: Measurements were conducted by AKRF, Inc. on October 2, 2019.

E. NOISE ATTENUATION MEASURES

As shown in **Table J-3**, the *CEQR Technical Manual* has set noise attenuation quantities for buildings based on exterior $L_{10(1)}$ noise levels in order to maintain interior noise levels of 45 dBA or lower for residential and community facility uses and interior noise levels of 50 dBA or lower for commercial office uses. The results of the building attenuation analysis are summarized in **Table J-5**.

Table J-5
CEQR Building Attenuation Requirements (in dBA)

Building Façade Location	Applicable Noise Receptor	Maximum Projected L_{10}[(1)]	Required Attenuation[(2)]
North (Along Dekalb Avenue more than 50 feet from Nostrand Avenue)	2	71.8	28
East (Along Nostrand Avenue), North and South (within 50 feet of Nostrand Avenue)	1	77.9	33
South (Along Kosciuszko Street more than 50 feet from Nostrand Avenue), West, Interior Courtyard	3	69.2	N/A

Notes:
(1) Measured noise levels adjusted where appropriate to account for potentially increased vehicular traffic volume in the future With Action condition.
(2) CEQR attenuation requirements are shown for residential and community facility uses; commercial office uses would require 5 dBA less attenuation.

Based on the values shown in **Table J-5**, required attenuation levels were determined for the Development Site. To implement this attenuation requirement, an (E) Designation for noise (E-606) would be applied to the Development Site (Block 1778, Lot 55) specifying the appropriate amount of window/wall attenuation. The text of E-606 would be as follows

> **Block 1778, Lot 55: In order to ensure an acceptable interior noise environment, future residential, community facility, and commercial development must provide minimum composite building façade attenuation as shown in Table J-5, in order to maintain an interior L_{10} noise level not greater than 45 dBA for residential and community facility**

uses or not greater than 50 dBA for commercial uses. To maintain a closed-window condition in these areas, an alternative means of ventilation that brings outside air into the building without degrading the acoustical performance of the building façade(s) must also be provided.

Normally, a building façade is composed of the wall, glazing, and any vents or louvers for HVAC systems in various ratios of area. The Proposed Development's façades, including these elements, would be designed to provide a composite Outdoor-Indoor Transmission Class (OITC) rating[1] greater than or equal to those listed in above in **Table J-5**, along with an alternative means of ventilation in all habitable rooms of the residential units as is required by the (E) Designation. By adhering to the design guidelines specified in the Noise (E) Designation described above, the Proposed Development would provide sufficient attenuation to achieve the *CEQR Technical Manual* interior noise level guidelines of 45 dBA L_{10} for residential or community facility uses and 50 dBA L_{10} for commercial uses.

F. MECHANICAL SYSTEM

The buildings' mechanical systems (i.e., heating, ventilation, and air conditioning systems) would be designed to meet all applicable noise regulations (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code and the New York City Department of Buildings Code) and to avoid producing levels that would result in any significant increase in ambient noise levels. ✶

[1] The OITC classification is defined by ASTM International (ASTM E1332) and provides a single-number rating that is used for designing a building façade including walls, doors, glazing, and combinations thereof. The OITC rating is designed to evaluate building elements by their ability to reduce the overall loudness of ground and air transportation noise.

APPENDIX A
AGENCY CORRESPONDENCE

Landmarks Preservation Commission

1 Centre Street
9th Floor North
New York, NY 10007

Voice (212)-669-7700
Fax (212)-669-7960
http://nyc.gov/landmarks

ENVIRONMENTAL REVIEW

Project number: LA-CEQR-K (DEPARTMENT OF CITY PLANNING)
Project: 270 NOSTRAND AVENUE
Address: 600 DEKALB AVENUE BBL: 3017780055
Date Received: 10/28/2019

[X**] No archaeological significance**

Gina Santucci 11/4/2019

SIGNATURE DATE
Gina Santucci, Environmental Review Coordinator

File Name: 34613_FSO_DNP_11042019.docx

Environmental Protection

Vincent Sapienza, P.E.
Commissioner

Angela Licata
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January 4, 2021

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Senior Project Manager
Environmental Assessment and Review Division
New York City Department of City Planning
120 Broadway, 31st Floor
New York, NY 10271

Re: 270 Nostrand Avenue
Block 1778, Lot 55 and p/o Lot 49
CEQR # 21DCP043K

Dear Mr. Howard:

The New York City Department of Environmental Protection, Bureau of Sustainability (DEP) has reviewed the August 2020 Environmental Assessment Statement, the November 2018 Phase I Environmental Site Assessment (Phase I), the November 2020 Phase II Subsurface Investigation and the November 2020 Remedial Action Plan (RAP) and November 2020 Construction Health and Safety Plan (CHASP) prepared by AKRF, Inc., on behalf of BRP East Brooklyn Development LLC (applicant) for the above referenced project. It is our understanding that the applicant is seeking approval of two actions (Proposed Actions) from the New York City Department of City Planning (DCP) to facilitate the development of an approximately 445,085 gross square foot mixed-use building containing residential, commercial, and community facility uses with attended parking at 270 Nostrand Avenue; Block 1778, Lot 55 (Development Site) in the Bedford Stuyvesant neighborhood of Brooklyn Community District 3. The area directly affected by the Proposed Actions consists of the entirety of the Development Site and an approximately 1.83-foot wide portion of the adjacent lot to the west (Block 1778, Lot 49) (Project Area). The currently vacant Development Site is approximately 47,634 square feet in size, is currently zoned R7A, and is within a Voluntary Inclusionary Housing designated area and the Transit Zone. The Proposed Actions consist of the following: an amendment to Zoning Map 17a to rezone the area within 240 feet of Nostrand Avenue from an R7A zoning district to an R8A zoning district, and to map a C2-4 commercial overlay within 100 feet of Nostrand Avenue and extending 240 feet within 100 feet of Dekalb Avenue (comprising the Development Site, and an approximately 1.83-foot-wide portion of adjacent Lot 49; and a zoning text amendment to Appendix F of the Zoning Resolution to designate the Project Area as a Mandatory Inclusionary Housing Area. In the future with and without the Proposed Actions, no changes are expected to occur on Lot 49.

The November 2018 Phase I report revealed that historical on-site and surrounding area land uses consisted of a variety of residential, commercial, and

industrial uses including carpentry shops, upholsterers, a plumbing and heating business, a paint shop, auto repair, garages with gasoline underground storage tanks, factories, a metal works, a machine shop, a coal yard, paint shops, a hat factory and clothing factory with felting, dyeing, and chemical storage, laundries, dry cleaners, etc. Regulatory databases identified 275 spills and 2 brownfield cleanup sites within 1/2 mile, and one chemical bulk storage facility and 11 petroleum bulk storage facilities within 1/8 mile of the subject property.

During the November 2020 fieldwork, Eastern Environmental Solutions, Inc. advanced nine borings (SB-B1 through SB-B9) to approximately 15 feet below grade surface (bgs). Several attempts were made throughout the entire site to reach the water table; however, refusal was consistently encountered on boulders and presumed former building foundation elements between approximately 15 and 28 bgs. As such, no groundwater samples were able to be collected for laboratory analysis. From each boring, one sample was collected from the top two feet of soil and a second sample was collected from the two-foot interval displaying the greatest evidence of contamination, or in the absence of any such evidence, at the maximum proposed redevelopment excavation depth in that given area. A third sample was collected from SB-7 from 5-7 feet bgs to further characterize shallow fill materials. Soil samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260, semi-volatile organic compounds (SVOCs) by EPA Method 8270, pesticides by EPA Method 8081, polychlorinated biphenyls (PCBs) by EPA Method 8082 and Target Analyte List metals by EPA Method 6000/7000 series. Five soil vapor samples (SV-1, SV-3, SV-5, SV-7, and SV-9) were collected and analyzed for VOCs by EPA Method TO-15.

The soil analytical results revealed that one VOC (acetone), several SVOCs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene), several pesticides (4,4'-DDE, 4,4'-DDD and 4,4'-DDT), total PCBs, and several metals (barium, chromium, copper, lead, mercury, nickel, and zinc) were detected above their New York State Department of Environmental Conservation (NYSDEC) Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs) and/or Restricted Residential Use SCOs.

The soil vapor analytical results revealed that several VOCs (1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 1,3-butadiene, 2-butanone, 2-hexanone, 4-methyl-2-pentanone, acetone, benzene, carbon disulfide, carbon tetrachloride, chloroform, chloromethane, cyclohexane, Dichlorodifluoromethane, ethyl acetate, ethyl benzene, isopropanol, methylene chloride, n-heptane, n-hexane, o-xylene, p-ethyltoluene, propylene, tetrachloroethylene (PCE), tetrahydrofuran, toluene, trichloroethylene (TCE), and trichlorofluoromethane) were detected. PCE and TCE were detected above their air guideline values (September 2013 and August 2015 updates) in the New York State Department of Health's October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. PCE and TCE were detected at concentrations up to 250 $\mu g/m^3$ and 8.3 $\mu g/m^3$, respectively.

The November 2020 RAP proposes the excavation, transportation and off-site disposal of soil in accordance with federal, state and local requirements; if petroleum storage tanks are unexpectedly encountered, the tanks and any appurtenances will be cleaned, removed and disposed of in accordance with accepted industry standards and applicable federal, state, and

local regulatory agency requirements; if dewatering is necessary during the proposed construction, it will be conducted in accordance with a New York City Department of Environmental Protection Bureau of Wastewater Treatment Wastewater Quality Control Permit; stockpiled soil will be covered with polyethylene sheeting; dust control; air monitoring; installation of a minimum 20-mil reinforced membrane (e.g., Grace Florprufe or a DEP-approved equivalent) applied to the underside of new foundation slabs and the outside of the perimeter sub-grade walls; installation of a passive venting system (PVS/sub-slab depressurization system or SSDS), with potential for upgrade to an active system, will be installed beneath the building (not including under areas of the proposed parking garage, which would require separate ventilation); and any unpaved portions (if applicable) of the Site will have a soil cap consisting of two feet of imported clean fill. The November 2020 CHASP addresses worker and community health and safety during construction.

Based upon our review of the submitted documentation, we have the following comments and recommendations to DCP:

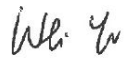
- DCP should instruct the applicant that a Community Air Monitoring Plan for VOCs and particulates should be developed and implemented in accordance with the NYSDEC Division of Environmental Remediation DER-10 (Appendix 1A) and described in the RAP and CHASP.

- DCP should inform the applicant that upon completion of the clean fill/top soil investigation activities, the applicant should submit a detailed clean soil report for DEP review and approval prior to importation and placement on-site. The report should include, at a minimum, an executive summary, narrative of the field activities, laboratory data, and comparison of soil analytical results (i.e., NYSDEC 6 NYCRR Part 375 Environmental Remediation Programs).

DEP finds the November 2020 RAP and CHASP for the proposed project acceptable, as long as the aforementioned information is incorporated into the RAP and CHASP. DCP should instruct the applicant that at the completion of the project, a Professional Engineer (P.E.) certified Remedial Closure Report should be submitted for DEP review and approval for the proposed project. The P.E. certified Remedial Closure Report should indicate that all remedial requirements have been properly implemented (i.e., transportation/disposal manifests for removal and disposal of soil in accordance with federal, state and local requirements; installation of vapor barrier; installation of PVS/SSDS; and two feet of DEP approved certified clean fill/top soil capping requirement in any landscaped/grass covered areas not capped with concrete/asphalt, etc.).

Future correspondence and submittals related to this project should include the following CEQR **# 21DCP043K.** If you have any questions, you may contact Mohammad Khaja-Moinuddin at (718) 595-4445.

Sincerely,



Wei Yu
Deputy Director, Hazardous Materials

c: R. Weissbard
M. Khaja-Moinuddin
T. Estesen
M. Wimbish
R. Lucas
O. Abinader - DCP

February 1, 2021

Anthony M Howard
Senior Project Manager
NYC Dept. of City Planning
120 Broadway
New York, NY 10271

Re: **270 Nostrand Ave – Construction Duration**

Dear Mr. Howard:

We have reviewed the proposed building at the above-mentioned address to evaluate construction timeframe.
It is a 14-story cast-in-place concrete structure.

We noted the following design conditions in our assessment:

- Cast-in-place concrete is significantly faster than precast plank & beam, and carries less delay risk due to fabrication/delivery.
- The foundation footprint is set back from neighboring buildings, which eliminates the need for underpinning.
- Dewatering measures will not be required as groundwater is found at 40' below ground surface.
- The large floorplates will allow multiple trade teams to work concurrently.

Please refer to the enclosed preliminary schedule which demonstrates the sequence of work. As shown, this project would take under 24-months to complete.

Some important schedule highlights are listed below:

- Excavation/foundation begin Month 1 and continues into Month 4.
- Excavation/SOE will begin at northwest corner and circle clockwise to the southwest. This will allow foundation work to commence at the northwest approximately 4 weeks into the SOE phase.
- Superstructure construction begins middle of Month 6 and ends in Month 12.
- Schedule assumes a street crane for superstructure.

- Floor cycle is per the scheduled durations. Slab pours range from 6-8 days depending on floor plate size.
- 1st floor and mezz have additional time allocated for the added complexities typical of these levels.
- MEP risers begin 7-10 days after slab is poured. Branchwork and framing typically start 28 days after pour, when reshores are removed.
- Façade work commences in Month 7 and continues into Month 15
- Special consideration would be given to critical path trade buyouts such as façade to ensure building is watertight as early as possible.
- Schedule assumes temp waterproofing at elevator shaft to allow early elevator installation.
- There is a possibility to utilize additional temp waterproofing measures to improve the schedule.
- Interiors and finishes commence Month 8 and continue into Month 23.
- TCO is a 7-week process which would begin well before the projected date to ensure that this milestone is achieved.
- Retail spaces are assumed to be “whitebox”. If buildout plans are provided early enough in the process, then buildout can be accommodated within scheduled timeframe.

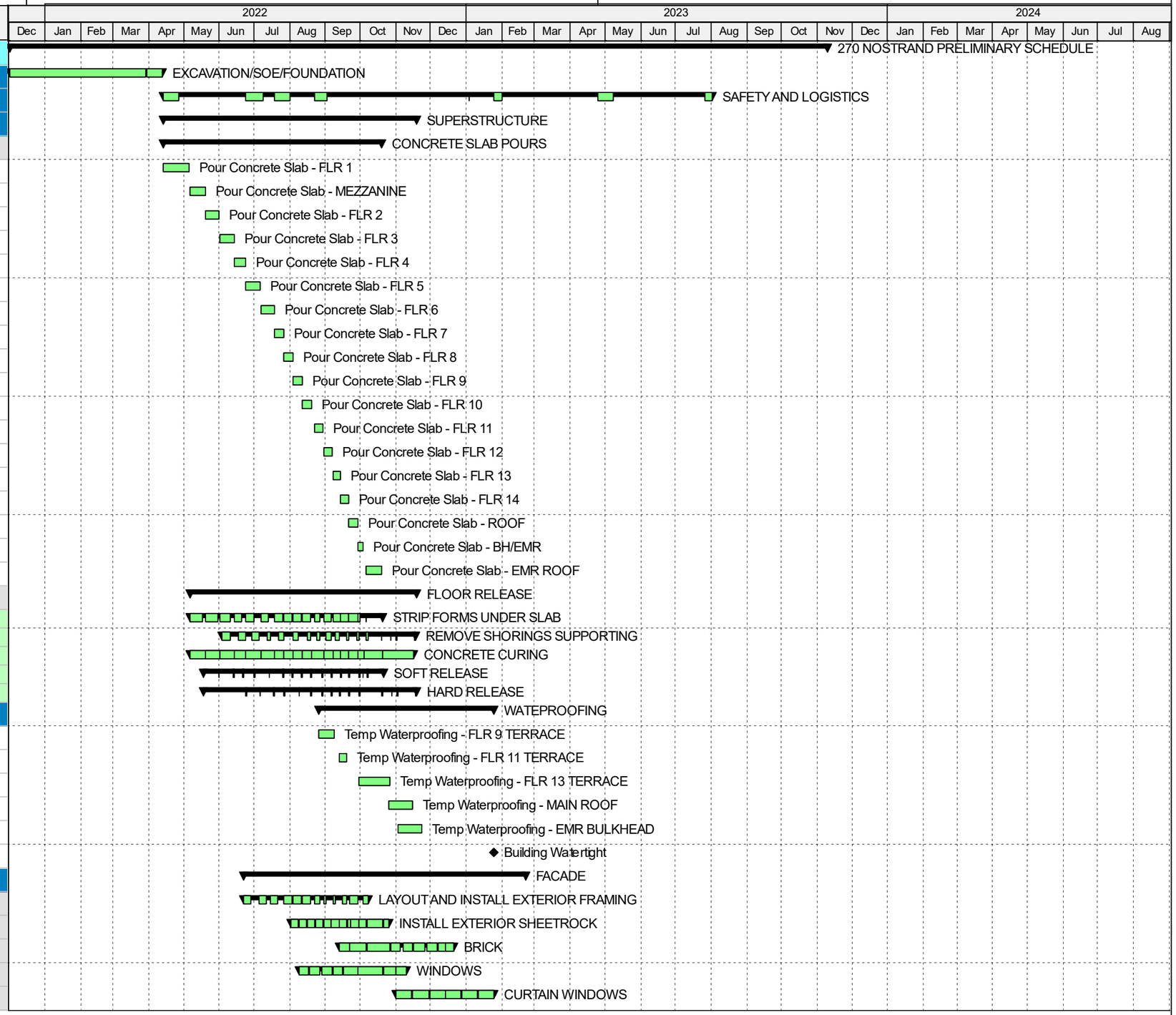
Sincerely,



Elliot Lazarus
Preconstruction Project Manager

Enclosure: 270 Nostrand construction schedule

Activity Name	Original Duration	Start	Finish
270 NOSTRAND PRELIMINARY SCHEDULE	471	12-01-21	11-09-23
EXCAVATION/SOE/FOUNDATION	93	12-01-21	04-12-22
SAFETY AND LOGISTICS	313	04-13-22	08-01-23
SUPERSTRUCTURE	140	04-13-22	11-18-22
CONCRETE SLAB POURS	118	04-13-22	10-19-22
Pour Concrete Slab - FLR 1	12	04-13-22	05-05-22
Pour Concrete Slab - MEZZANINE	10	05-06-22	05-19-22
Pour Concrete Slab - FLR 2	8	05-20-22	05-31-22
Pour Concrete Slab - FLR 3	8	06-01-22	06-13-22
Pour Concrete Slab - FLR 4	8	06-14-22	06-23-22
Pour Concrete Slab - FLR 5	8	06-24-22	07-06-22
Pour Concrete Slab - FLR 6	8	07-07-22	07-18-22
Pour Concrete Slab - FLR 7	6	07-19-22	07-26-22
Pour Concrete Slab - FLR 8	6	07-27-22	08-03-22
Pour Concrete Slab - FLR 9	6	08-04-22	08-11-22
Pour Concrete Slab - FLR 10	6	08-12-22	08-19-22
Pour Concrete Slab - FLR 11	6	08-22-22	08-29-22
Pour Concrete Slab - FLR 12	6	08-30-22	09-06-22
Pour Concrete Slab - FLR 13	5	09-07-22	09-13-22
Pour Concrete Slab - FLR 14	5	09-14-22	09-20-22
Pour Concrete Slab - ROOF	4	09-21-22	09-28-22
Pour Concrete Slab - BH/EMR	3	09-29-22	10-03-22
Pour Concrete Slab - EMR ROOF	3	10-06-22	10-19-22
FLOOR RELEASE	128	05-06-22	11-18-22
STRIP FORMS UNDER SLAB	107	05-06-22	10-20-22
REMOVE SHORINGS SUPPORTING	107	06-03-22	11-17-22
CONCRETE CURING	195	05-06-22	11-16-22
SOFT RELEASE	100	05-18-22	10-21-22
HARD RELEASE	120	05-18-22	11-18-22
WATEPROOFING	96	08-26-22	01-24-23
Temp Waterproofing - FLR 9 TERRACE	10	08-26-22	09-08-22
Temp Waterproofing - FLR 11 TERRACE	5	09-13-22	09-19-22
Temp Waterproofing - FLR 13 TERRACE	10	09-30-22	10-26-22
Temp Waterproofing - MAIN ROOF	15	10-26-22	11-15-22
Temp Waterproofing - EMR BULKHEAD	15	11-03-22	11-23-22
Building Watertight	0		01-24-23
FACADE	162	06-22-22	02-21-23
LAYOUT AND INSTALL EXTERIOR FRAMING	73	06-22-22	10-07-22
INSTALL EXTERIOR SHEETROCK	50	08-02-22	10-25-22
BRICK	59	09-13-22	12-20-22
WINDOWS	56	08-09-22	11-09-22
CURTAIN WINDOWS	60	11-01-22	01-24-23



Remaining Level of Effort | Remaining Work | Summary
Actual Work | Critical Remaining Work | Milestone

Date	Revision	Ch...	Approved
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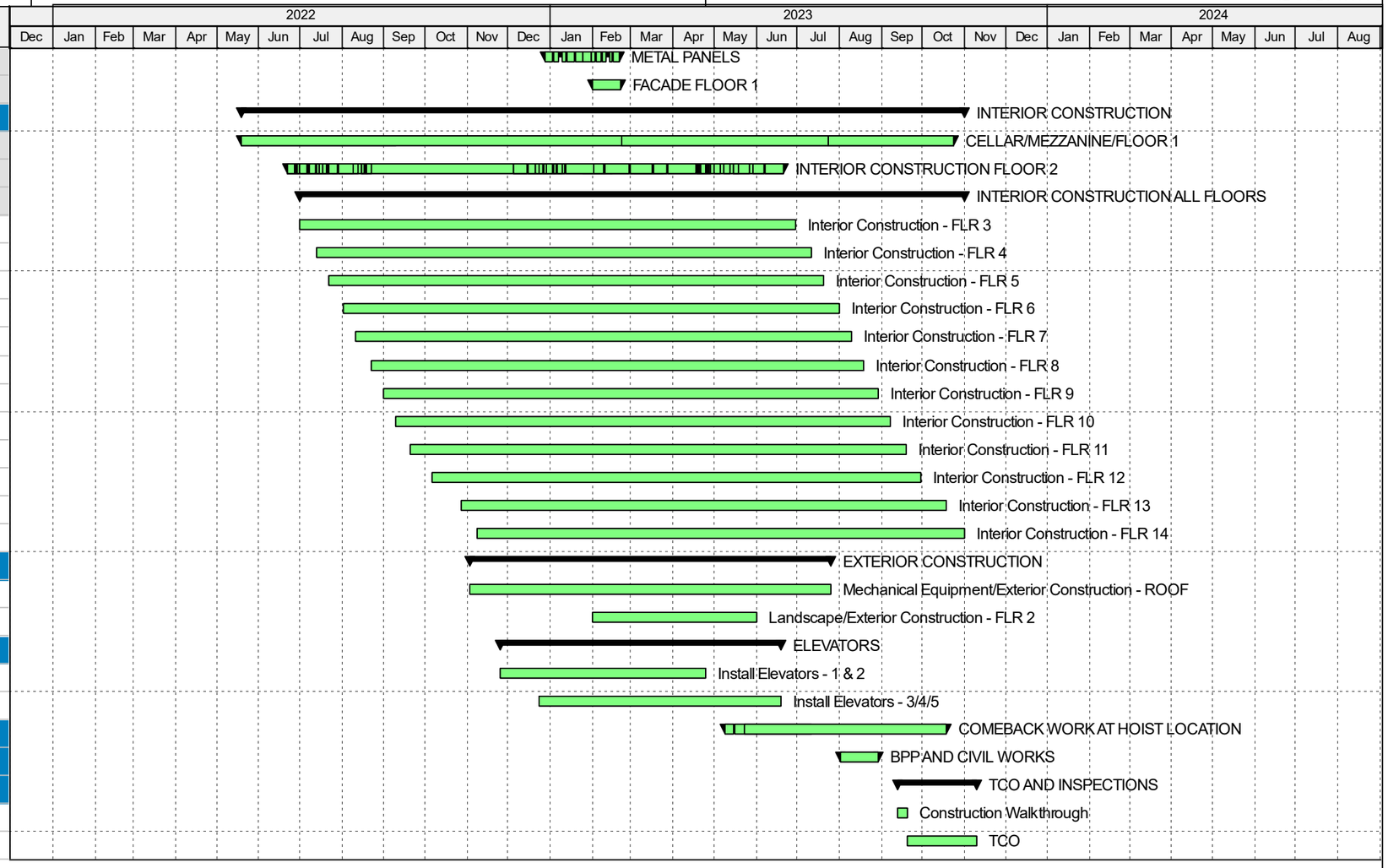
Activity Name	Original Duration	Start	Finish
METAL PANELS	39	12-28-22	02-20-23
FACADE FLOOR 1	15	02-01-23	02-21-23
INTERIOR CONSTRUCTION	350	05-19-22	10-31-23
CELLAR/MEZZANINE/FLOOR 1	345	05-19-22	10-23-23
INTERIOR CONSTRUCTION FLOOR 2	240	06-22-22	06-20-23
INTERIOR CONSTRUCTION ALL FLOORS	320	07-01-22	10-31-23
Interior Construction - FLR 3	240	07-01-22	06-29-23
Interior Construction - FLR 4	240	07-13-22	07-11-23
Interior Construction - FLR 5	240	07-22-22	07-20-23
Interior Construction - FLR 6	240	08-02-22	07-31-23
Interior Construction - FLR 7	240	08-11-22	08-09-23
Interior Construction - FLR 8	240	08-22-22	08-18-23
Interior Construction - FLR 9	240	08-31-22	08-29-23
Interior Construction - FLR 10	240	09-09-22	09-07-23
Interior Construction - FLR 11	240	09-20-22	09-18-23
Interior Construction - FLR 12	240	10-06-22	09-29-23
Interior Construction - FLR 13	240	10-27-22	10-18-23
Interior Construction - FLR 14	240	11-08-22	10-31-23
EXTERIOR CONSTRUCTION	180	11-03-22	07-25-23
Mechanical Equipment/Exterior Construction - ROOF	180	11-03-22	07-25-23
Landscape/Exterior Construction - FLR 2	80	02-01-23	06-01-23
ELEVATORS	140	11-25-22	06-19-23
Install Elevators - 1 & 2	100	11-25-22	04-24-23
Install Elevators - 3/4/5	120	12-23-22	06-19-23
COMEBACK WORK AT HOIST LOCATION	110	05-09-23	10-18-23
BPP AND CIVIL WORKS	20	08-02-23	08-29-23
TCO AND INSPECTIONS	35	09-13-23	11-09-23
Construction Walkthrough	5	09-13-23	09-19-23
TCO	30	09-20-23	11-09-23



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Date	Revision	Ch...	Approved
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